
WIRE (TM)

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MPSrch_pp protein - protein database search, using Smith-Waterman algorithm

Mon: Wed Aug 16 09:58:24 2000; Maspar time 4.96 Seconds
Tabular output not generated. 482.461 Million cell updates/sec

Title: >US-09-427-873-2
Description: (1-101) from US09427873.pep
Perfect Score: 101
Sequence: 1 LGKFSQTCYNIAQGSVLTS.....STKINDDHIANIDGLKYE 101

Scoring table: TABLE uniprotatable
Gap 60

Searched: 188963 seqs, 23686106 residues

Post-processing: Minimum Match 0%
Listing first 1000 summaries

Database: a-geneseq36
l:geneseqp

Statistics: Mean 2.441; Variance 0.631; scale 3.869

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Rank	Score	Query Match	Length	ID	Description	Pred. No.
1	101	100.0	101	W80552	Antiviral protein, cya	2.72e-148
2	101	100.0	101	W67569	N. ellipsoforum cyano	2.72e-148
3	101	100.0	101	W06811	Cyanovirin-N.	2.72e-148
4	101	100.0	109	W80553	Antiviral protein, cya	2.72e-148
5	101	100.0	109	W67570	FLAG epitope-cyanoviri	2.72e-148
6	101	100.0	109	W06812	FLAG-cyanovirin-N fusi	2.72e-148
7	8	7.9	299	R35970	Nucleic acid cogniti	3.39e-01
8	7	6.9	443	R20743	H. pylori cytoplasmic	5.52e+00
9	6	5.9	13	W14832	PDGF-1 oncogene protei	7.69e+01
10	6	5.9	48	W79087	Human secreted protein	7.69e+01
11	6	5.9	109	R25443	PDGF analogue #3.	7.69e+01
12	6	5.9	109	R42810	Mature human PDGF-B.	7.69e+01
13	6	5.9	109	R81030	Sequence of mature B-c	7.69e+01
14	6	5.9	109	R20967	Sequence of B-chain of	7.69e+01
15	6	5.9	109	R87515	PDGF mosaic peptide B2	7.69e+01
16	6	5.9	109	R25673	PDGF-B.	7.69e+01
17	6	5.9	109	R15643	PDGF B-chain polypepti	7.69e+01
18	6	5.9	110	R87517	PDGF mosaic peptide B/	7.69e+01
19	6	5.9	110	R25445	PDGF analogue #5.	7.69e+01
20	6	5.9	110	R25444	PDGF analogue #4.	7.69e+01
21	6	5.9	110	R86619	Mature human PDGF-B.	7.69e+01
22	6	5.9	110	R87516	PDGF mosaic peptide B/	7.69e+01
23	6	5.9	114	P80163	Biosynthetic multifunc	7.69e+01

1	R04020	PDGF-BB monomer unit.	7.69e+01
1	R26047	PDGF-B7.	7.69e+01
1	R41523	PDGF refolded B119 ho	7.69e+01
1	R67261	PDGF-B119.	7.69e+01
1	R12879	PDGF-B119 from pCFM11	7.69e+01
1	R60614	Human PDGF-B 119 subun	7.69e+01
1	R12881	Human PDGF-B 119 subun	7.69e+01
1	W64063	Chimeric rHPDGF-B expr	7.69e+01
1	W64062	Chimeric rHPDGF-B prot	7.69e+01
1	R26045	Synthetic PDGF-B.	7.69e+01
1	R26045	Synthetic PDGF-B.	7.69e+01
1	R87507	Caenorhabditis elegans	7.69e+01
1	R50012	Truncated platelet der	7.69e+01
1	R60615	Human PDGF-B 109 subun	7.69e+01
1	R05615	BIV vtf gene product.	7.69e+01
1	W53971	Crinipellis scabellia w	7.69e+01
1	W53970	Myelocytophthora thermop	7.69e+01
1	W64064	Chimeric rHPDGF-B prot	7.69e+01
1	W64066	Chimeric rHPDGF-B prot	7.69e+01
1	R68617	Human PDGF-B precursor	7.69e+01
1	R40965	Recombinant platelet d	7.69e+01
1	W04925	Cellulytic enzyme #1 o	7.69e+01
1	P60215	Sequence encoded by th	7.69e+01
1	W04930	Cellulytic enzyme #6 o	7.69e+01
1	P81029	Sequence encoded by th	7.69e+01
1	R2673	v-sis protein p28sis.	7.69e+01
1	R63472	Recombinant platelet d	7.69e+01
1	R50009	Platelet-derived Growt	7.69e+01
1	R50002	Platelet-derived Growt	7.69e+01
1	P80596	Recombinant platelet d	7.69e+01
1	R38919	Human platelet derived	7.69e+01
1	R40967	CV-sis gene product.	7.69e+01
1	W64065	Chimeric rHPDGF-B prot	7.69e+01
1	R40964	PDGF Bc-sis.	7.69e+01
1	P80597	CV-sis gene encoded pl	7.69e+01
1	R63469	Recombinant platelet d	7.69e+01
1	W31729	Mycobacterium tubercul	7.69e+01
1	W89843	Protein encoded by clo	7.69e+01
1	W89920	Antigen 5 from cluster	7.69e+01
1	R40963	PDGF Bv-sis.	7.69e+01
1	P80595	Recombinant platelet d	7.69e+01
1	R63468	Recombinant platelet d	7.69e+01
1	W06016	Human PDGF-B 119 linke	7.69e+01
1	W04936	Chimeric endoglucanase	7.69e+01
1	W04933	Chimeric endoglucanase	7.69e+01
1	W04935	Chimeric endoglucanase	7.69e+01
1	W81823	Human VTAP-2 protein.	7.69e+01
1	W04934	Chimeric endoglucanase	7.69e+01
1	W27267	Streptococcus pneumoni	7.69e+01
1	R98154	Blowfly PM48 antigen.	7.69e+01
1	W79743	Crepis sp. delta-12-ep	7.69e+01
1	W79742	Crepis palaestina delt	7.69e+01
1	R38267	Sequence encoded by pa	7.69e+01
1	R05277	New serine hydroxymeth	7.69e+01
1	R78621	Chicken GalNAc-alpha-2	7.69e+01
1	R97745	Serine hydroxymethyl t	7.69e+01
1	Y00170	Enterococcus faecalis	7.69e+01
1	Y00895	Rat GMEB-2' protein se	7.69e+01
1	W04334	Human lymphoid cell ac	7.69e+01
1	W04264	Human CD39 protein.	7.69e+01
1	Y00031	Enterococcus faecalis	7.69e+01
1	Y00894	Rat GMEB-2 protein seq	7.69e+01
1	Y00030	Enterococcus faecalis	7.69e+01
1	R92050	KM31-7 precursor	7.69e+01
1	W33404	Human KM-102-derived r	7.69e+01
1	W41501	Human DP.75; a putativ	7.69e+01
1	R42087	D. melanogaster dorsal	7.69e+01
1	P61518	Sequence of cyclomalto	7.69e+01
1	R38266	Sequence of a bovine p	7.69e+01
1	W03319	Tobacco transketolase.	7.69e+01
1	W89914	Antigen from cluster	7.69e+01
1	R52568	PEPCase gene in lambda	7.69e+01
1	W42103	Human p115 Rho-guanine	7.69e+01

97	1266	1	W48721	Human cytoplasmic isol	7.69e-01	170	5	5.0	135	1	R40175	Humanised antibody CMX	8.72e+02
98	1475	1	R08221	Recombinant alpha amyl	7.69e-01	171	5	5.0	135	1	R40179	Humanised antibody CMX	8.72e+02
99	5	5.0	R63585	Conserved region 2 fro	8.72e+02	172	5	5.0	135	1	R40177	Humanised antibody CMX	8.72e+02
100	5	5.0	R90560	Human influenza A viru	8.72e+02	173	5	5.0	135	1	R40183	Humanised antibody CMX	8.72e+02
101	5	5.0	R76589	Control peptide from P	8.72e+02	174	5	5.0	140	1	R87058	CDR grafted anti-IL-5	8.72e+02
102	5	5.0	R22457	Peptide encoded by DNA	8.72e+02	175	5	5.0	140	1	W88981	Polypeptide fragment e	8.72e+02
103	5	5.0	R77941	Jojoba wax-synthase pe	8.72e+02	176	5	5.0	141	1	R70979	Crocodile alpha-globin	8.72e+02
104	5	5.0	R77181	Jojoba 57 kDa wax synt	8.72e+02	177	5	5.0	142	1	R52664	Fibronectin bind prote	8.72e+02
105	5	5.0	R79718	gp120 immunogenic pep	8.72e+02	178	5	5.0	143	1	R41533	M. fermentans incognitu	8.72e+02
106	5	5.0	R56619	Alginic acid AL-II-2.1	8.72e+02	179	5	5.0	144	1	R28237	Staphylococcus aureus	8.72e+02
107	5	5.0	R77618	Ascorbate oxidase N-te	8.72e+02	180	5	5.0	146	1	W73397	Human secreted protein	8.72e+02
108	5	5.0	R61238	Alginase lyase II N-te	8.72e+02	181	5	5.0	148	1	Y12370	Human 5' EST secreted	8.72e+02
109	5	5.0	Y11611	Human 5' EST secreted	8.72e+02	182	5	5.0	151	1	W85641	Human zcyto7 mature pr	8.72e+02
110	5	5.0	R22455	BGP N-terminal fractio	8.72e+02	183	5	5.0	152	1	W20280	H. pylori cytoplasmic	8.72e+02
111	5	5.0	R46479	Consensus sequence of	8.72e+02	184	5	5.0	153	1	W85642	Human zcyto7 mature pr	8.72e+02
112	5	5.0	W79434	Staphylococcus aureus	8.72e+02	185	5	5.0	154	1	W85640	Human zcyto7 mature pr	8.72e+02
113	5	5.0	R81711	C.albicans enolase pep	8.72e+02	186	5	5.0	156	1	W97559	Acetobacter xylinum bc	8.72e+02
114	5	5.0	W79433	Staphylococcus aureus	8.72e+02	187	5	5.0	156	1	R45003	Cellulose synthase ope	8.72e+02
115	5	5.0	W79019	Sequence ID #719 from	8.72e+02	188	5	5.0	157	1	R81709	Recombinant C.albicans	8.72e+02
116	5	5.0	R75093	Rat SIII 15 kDa subuni	8.72e+02	189	5	5.0	157	1	W85644	Human zcyto7 mature pr	8.72e+02
117	5	5.0	P80653	Peptide encoded by pro	8.72e+02	190	5	5.0	158	1	W85639	Human zcyto7 mature pr	8.72e+02
118	5	5.0	R05809	Signal peptide derived	8.72e+02	191	5	5.0	159	1	W85634	Human microtubule-asso	8.72e+02
119	5	5.0	R72967	pig kidney cell mutaro	8.72e+02	192	5	5.0	160	1	W85618	Human zcyto7 mature pr	8.72e+02
120	5	5.0	R60167	Rice mitochondrial pro	8.72e+02	193	5	5.0	160	1	W85625	Human zcyto7 mature pr	8.72e+02
121	5	5.0	W62694	Streptococcus pneumoni	8.72e+02	194	5	5.0	160	1	W85619	Human zcyto7 mature pr	8.72e+02
122	5	5.0	W48346	Human breast cancer re	8.72e+02	195	5	5.0	160	1	W85629	Human zcyto7 mature pr	8.72e+02
123	5	5.0	W88624	Secreted protein encod	8.72e+02	196	5	5.0	160	1	W85624	Human zcyto7 mature pr	8.72e+02
124	5	5.0	R51626	p53 antisense strand p	8.72e+02	197	5	5.0	160	1	W85623	Human zcyto7 mature pr	8.72e+02
125	5	5.0	W26679	5.0 kDa bacteriocalic	8.72e+02	198	5	5.0	160	1	W85620	Human zcyto7 mature pr	8.72e+02
126	5	5.0	W26675	Bacteriocalicin-1 fro	8.72e+02	199	5	5.0	160	1	W85627	Human zcyto7 mature pr	8.72e+02
127	5	5.0	W45409	N-terminal amino acid	8.72e+02	200	5	5.0	160	1	W85621	Human zcyto7 mature pr	8.72e+02
128	5	5.0	W32339	Mycobacterium tubercul	8.72e+02	201	5	5.0	160	1	W85626	Human zcyto7 mature pr	8.72e+02
129	5	5.0	W64334	Mycobacterium tubercul	8.72e+02	202	5	5.0	160	1	W85622	Human zcyto7 mature pr	8.72e+02
130	5	5.0	W32466	Mycobacterium tubercul	8.72e+02	203	5	5.0	160	1	W85628	Human zcyto7 mature pr	8.72e+02
131	5	5.0	W81701	M. tuberculosis immuno	8.72e+02	204	5	5.0	163	1	R60215	Immunogenic fragment o	8.72e+02
132	5	5.0	W99675	Enzyme component conta	8.72e+02	205	5	5.0	163	1	R38877	Sequence of haemagglut	8.72e+02
133	5	5.0	Y04113	Enzyme component #2.	8.72e+02	206	5	5.0	165	1	Y04934	Mycobacterium species	8.72e+02
134	5	5.0	Y11192	S. pneumoniae L-lactat	8.72e+02	207	5	5.0	166	1	W67636	MSRV-1 virus clone LB1	8.72e+02
135	5	5.0	R64243	CCSL based on HPV-6 DN	8.72e+02	208	5	5.0	166	1	W85048	Amino acid sequence of	8.72e+02
136	5	5.0	W13014	MF2 protein induces pa	8.72e+02	209	5	5.0	169	1	W42106	Amino acid sequence of	8.72e+02
137	5	5.0	R39108	LD78 Gln21>Ser.	8.72e+02	210	5	5.0	180	1	W97350	Interleukin-20.	8.72e+02
138	5	5.0	R09348	Sequence corresp. to r	8.72e+02	211	5	5.0	180	1	W85615	Human zcyto7.	8.72e+02
139	5	5.0	W46470	Amino acid sequence of	8.72e+02	212	5	5.0	185	1	W41975	Flea serine protease S	8.72e+02
140	5	5.0	R03105	CD4 receptor protein a	8.72e+02	213	5	5.0	188	1	R70744	PagC protein.	8.72e+02
141	5	5.0	W27906	Amino acid sequence of	8.72e+02	214	5	5.0	188	1	W18380	S. typhimurium pagC ge	8.72e+02
142	5	5.0	W85636	Antigenic epitope of z	8.72e+02	215	5	5.0	188	1	R26415	Human delta-2 protein	8.72e+02
143	5	5.0	Y12267	Human 5' EST secreted	8.72e+02	216	5	5.0	191	1	W33377	Human HPDDV78 protein	8.72e+02
144	5	5.0	W88658	Secreted protein encod	8.72e+02	217	5	5.0	191	1	R99852	Proteinase A subunit.	8.72e+02
145	5	5.0	W61202	Streptococcus pneumoni	8.72e+02	218	5	5.0	194	1	W72394	Pathogen response prot	8.72e+02
146	5	5.0	W98215	H. pylori GHPO 1213 pr	8.72e+02	219	5	5.0	208	1	W75130	Human secreted protein	8.72e+02
147	5	5.0	R70799	Human secreted protein	8.72e+02	220	5	5.0	208	1	W98872	H. pylori GHPO 1732 pr	8.72e+02
148	5	5.0	W85630	Antigenic epitope of z	8.72e+02	221	5	5.0	212	1	W99164	RASGAP catalytic domai	8.72e+02
149	5	5.0	R47067	HaEPV p11.5 ORF.	8.72e+02	222	5	5.0	213	1	W99179	RASGAP catalytic domai	8.72e+02
150	5	5.0	W15397	HaEPV 11 kDa insectici	8.72e+02	223	5	5.0	213	1	W68412	Hybrid alpha-1-thymosi	8.72e+02
151	5	5.0	Y11125	S. pneumoniae faecalis	8.72e+02	224	5	5.0	216	1	W30839	MyoK1 protein myoK1p.	8.72e+02
152	5	5.0	Y00037	Enterococcus faecalis	8.72e+02	225	5	5.0	218	1	W15104	Myxoma virus MA56 gene	8.72e+02
153	5	5.0	R52074	Heavy chain variable r	8.72e+02	226	5	5.0	220	1	Y11027	H. pylori ORF 02ge4162	8.72e+02
154	5	5.0	W22724	Sinapis alba flowering	8.72e+02	227	5	5.0	220	1	R88272	Papilloma virus major	8.72e+02
155	5	5.0	W22486	Phaffia derived glycer	8.72e+02	228	5	5.0	221	1	R88273	Papilloma virus major	8.72e+02
156	5	5.0	W22725	Arabidopsis flowering	8.72e+02	229	5	5.0	221	1	R38866	Sequence of the HA2 su	8.72e+02
157	5	5.0	R40173	Humanised IL-5 antibod	8.72e+02	230	5	5.0	222	1	R60222	Influenza haemagglutin	8.72e+02
158	5	5.0	W58486	Murine HYH antibody he	8.72e+02	231	5	5.0	223	1	W97837	Tobacco rTmC1 homologue	8.72e+02
159	5	5.0	R38608	HYH heavy chain.	8.72e+02	232	5	5.0	223	1	R58271	Papilloma virus major	8.72e+02
160	5	5.0	R52663	FNB curlin.	8.72e+02	233	5	5.0	224	1	W79902	Mycobacterium tubercul	8.72e+02
161	5	5.0	W38583	Streptococcus pneumoni	8.72e+02	234	5	5.0	226	1	W49694	Human ScFv5 against al	8.72e+02
162	5	5.0	W56091	Human secreted protein	8.72e+02	235	5	5.0	229	1	W49690	Human ScFv1 against al	8.72e+02
163	5	5.0	R44591	Monomeric PDGF-A.	8.72e+02	236	5	5.0	236	1	W49691	Human ScFv2 against al	8.72e+02
164	5	5.0	W97351	Amino acid sequence of	8.72e+02	237	5	5.0	237	1	W23085	Microscilla furvescens	8.72e+02
165	5	5.0	Y11047	H. pylori ORF hp2el091	8.72e+02	238	5	5.0	237	1	W49692	Human ScFv3 against al	8.72e+02
166	5	5.0	W31265	Neospora caninum anti	8.72e+02	239	5	5.0	240	1	R44027	Lys-63 cholera toxin s	8.72e+02
167	5	5.0	W97716	Staphylococcus aureus	8.72e+02	240	5	5.0	244	1	W68593	Tiarosporella phaseoli	8.72e+02
168	5	5.0	Y00036	Enterococcus faecalis	8.72e+02	241	5	5.0	249	1	W24061	Human WSX receptor ago	8.72e+02
169	5	5.0	W85643	Human zcyto7 mature pr	8.72e+02	242	5	5.0					

243	5	5.0	249	1	R34549	Putative calcium chann	8.72e+02	316	5	5.0	303	1	R46248	Heat-stable carbamylas	8.72e+02
244	5	5.0	251	1	R97012	Influenza virus matrix	8.72e+02	317	5	5.0	303	1	R46261	Improved Heat-stable c	8.72e+02
245	5	5.0	252	1	R32021	Influenza matrix prote	8.72e+02	318	5	5.0	303	1	R46239	Heat-stable carbamylas	8.72e+02
246	5	5.0	252	1	R36804	Influenza A virus matr	8.72e+02	319	5	5.0	304	1	W70445	Mutant D-N-alpha-carba	8.72e+02
247	5	5.0	254	1	R49693	Human SCFv4 against al	8.72e+02	320	5	5.0	304	1	W13405	Eupenicillium brefeldi	8.72e+02
248	5	5.0	254	1	P70263	Protein comprising sig	8.72e+02	321	5	5.0	304	1	R2836	Agrobacterium radiobac	8.72e+02
249	5	5.0	256	1	W75103	Human secreted protein	8.72e+02	322	5	5.0	304	1	R38880	Sequence of haemagglut	8.72e+02
250	5	5.0	257	1	W55602	H. pylori ORF 1lap2071	8.72e+02	323	5	5.0	304	1	R53639	Carbamoylase enzyme of	8.72e+02
251	5	5.0	259	1	R94586	C. pneumoniae polypept	8.72e+02	324	5	5.0	304	1	W70448	Mutant D-N-alpha-carba	8.72e+02
252	5	5.0	259	1	W01743	C. pneumoniae 53 kDa a	8.72e+02	325	5	5.0	304	1	W70449	Mutant D-N-alpha-carba	8.72e+02
253	5	5.0	263	1	R22957	Human proteasome compo	8.72e+02	326	5	5.0	304	1	W70446	Mutant D-N-alpha-carba	8.72e+02
254	5	5.0	263	1	W69232	FCR-II protein sequenc	8.72e+02	327	5	5.0	304	1	W70447	Mutant D-N-alpha-carba	8.72e+02
255	5	5.0	265	1	W74905	Human secreted protein	8.72e+02	328	5	5.0	305	1	R3612	Kaposi's sarcoma assoc	8.72e+02
256	5	5.0	265	1	R80063	Human IFNAB-BPI encode	8.72e+02	329	5	5.0	305	1	R37836	Kaposi's sarcoma assoc	8.72e+02
257	5	5.0	269	1	W98462	H. pylori GHPO 726 pro	8.72e+02	330	5	5.0	306	1	W80671	S. pneumoniae protein	8.72e+02
258	5	5.0	269	1	R60210	Immunogenic fragment o	8.72e+02	331	5	5.0	306	1	W60856	FabD polypeptide seque	8.72e+02
259	5	5.0	269	1	R38872	Sequence of H1 subtype	8.72e+02	332	5	5.0	307	1	R38870	Sequence of C13 which	8.72e+02
260	5	5.0	269	1	R23666	Protein used to raise	8.72e+02	333	5	5.0	307	1	R4207	C13 protein - a recomb	8.72e+02
261	5	5.0	269	1	W1545	Helicobacter polypepti	8.72e+02	334	5	5.0	309	1	W83322	Single chain Apo-2 ant	8.72e+02
262	5	5.0	271	1	R4580	C. pneumoniae polypept	8.72e+02	335	5	5.0	309	1	W98581	H. pylori GHPO 65 prot	8.72e+02
263	5	5.0	273	1	W77635	Potassium-transporting	8.72e+02	336	5	5.0	311	1	W53549	Human Cdx2 protein.	8.72e+02
264	5	5.0	275	1	W55565	H. pylori ORF 06cpl121	8.72e+02	337	5	5.0	312	1	Y05528	Soybean isoflavone red	8.72e+02
265	5	5.0	278	1	W52270	H. pylori ORF 09ap9080	8.72e+02	338	5	5.0	312	1	W83323	Single chain Apo-2 ant	8.72e+02
266	5	5.0	279	1	R45226	Korean Viper Salmosa t	8.72e+02	339	5	5.0	312	1	W83323	JTV1 protein.	8.72e+02
267	5	5.0	281	1	R25719	Prod. of gene regulati	8.72e+02	340	5	5.0	314	1	W25776	OMT1.A and OMT1.B tran	8.72e+02
268	5	5.0	282	1	R2752	Protease-A.	8.72e+02	341	5	5.0	315	1	W53922	Decaprenyl diphosphate	8.72e+02
269	5	5.0	283	1	W36025	Fragment of MSRV-1 gag	8.72e+02	342	5	5.0	315	1	W19946	Alzheimer's disease pr	8.72e+02
270	5	5.0	283	1	W37469	Connexin-32.	8.72e+02	343	5	5.0	315	1	R60599	Hornet phospholipase D	8.72e+02
271	5	5.0	283	1	W17085	Multiple sclerosis ass	8.72e+02	344	5	5.0	317	1	P90500	Pseudomonas cepacia II	8.72e+02
272	5	5.0	284	1	W13238	Human steroidogenesis	8.72e+02	345	5	5.0	323	1	W05832	M. tuberculosis RNA po	8.72e+02
273	5	5.0	285	1	W13237	Human steroidogenesis	8.72e+02	346	5	5.0	324	1	W25117	CD2-associated intrace	8.72e+02
274	5	5.0	285	1	W13236	Human steroidogenesis	8.72e+02	347	5	5.0	324	1	W80421	CD2-associated intrace	8.72e+02
275	5	5.0	285	1	W00814	Human steroidogenesis	8.72e+02	348	5	5.0	324	1	W26497	CD2 associated intrace	8.72e+02
276	5	5.0	285	1	W13234	Human steroidogenesis	8.72e+02	349	5	5.0	325	1	W82241	A protein with sterios	8.72e+02
277	5	5.0	286	1	R89917	Modified lncC protein,	8.72e+02	350	5	5.0	325	1	W00504	N.meningitidis IM2394	8.72e+02
278	5	5.0	288	1	Y05394	Human IIE ligand NL3 p	8.72e+02	351	5	5.0	328	1	W55486	H. pylori ORF hp2p1037	8.72e+02
279	5	5.0	289	1	W48804	Homo sapiens clone BK1	8.72e+02	352	5	5.0	329	1	W87563	A protein with sterios	8.72e+02
280	5	5.0	289	1	W01128	Coat protein (short ve	8.72e+02	353	5	5.0	330	1	W98878	H. pylori GHPO 1751 pr	8.72e+02
281	5	5.0	292	1	R04895	Penicillinase-Insulin	8.72e+02	354	5	5.0	330	1	W98788	H. pylori GHPO 1223 pr	8.72e+02
282	5	5.0	292	1	W61001	Streptococcus pneumoni	8.72e+02	355	5	5.0	330	1	W87564	A protein with sterios	8.72e+02
283	5	5.0	292	1	R90545	PJG4-5-CDK-BP clone #1	8.72e+02	356	5	5.0	331	1	R80066	Human IFNAB-BPI.	8.72e+02
284	5	5.0	293	1	W44873	Murine BIN-1 Associate	8.72e+02	357	5	5.0	334	1	W19854	Human purinergic recep	8.72e+02
285	5	5.0	299	1	W69198	Aspartate-specific cys	8.72e+02	358	5	5.0	334	1	W22732	Human ATP receptor.	8.72e+02
286	5	5.0	301	1	R12315	Peptide fragment of HI	8.72e+02	359	5	5.0	335	1	W82830	Endothelial MAD intera	8.72e+02
287	5	5.0	303	1	R46266	Improved Heat-stable c	8.72e+02	360	5	5.0	335	1	W75857	Human secretory protei	8.72e+02
288	5	5.0	303	1	R46264	Improved Heat-stable c	8.72e+02	361	5	5.0	336	1	W23397	Twik-1 potassium chann	8.72e+02
289	5	5.0	303	1	R46253	Heat-stable carbamylas	8.72e+02	362	5	5.0	336	1	R37986	F22b7.7 potassium chan	8.72e+02
290	5	5.0	303	1	R46240	Heat-stable carbamylas	8.72e+02	363	5	5.0	338	1	W55522	H. pylori ORF 14ap1022	8.72e+02
291	5	5.0	303	1	R46262	Improved Heat-stable c	8.72e+02	364	5	5.0	339	1	W99578	C.albicans Cdk activat	8.72e+02
292	5	5.0	303	1	R46259	Improved Heat-stable c	8.72e+02	365	5	5.0	340	1	R98887	N.meningitidis IM2394	8.72e+02
293	5	5.0	303	1	R46242	Heat-stable carbamylas	8.72e+02	366	5	5.0	340	1	W14644	N. meningitidis IM2394	8.72e+02
294	5	5.0	303	1	R46244	Heat-stable carbamylas	8.72e+02	367	5	5.0	341	1	R70142	Porcine mutarotase (MU	8.72e+02
295	5	5.0	303	1	R46263	Heat-stable carbamylas	8.72e+02	368	5	5.0	342	1	W36040	Alfaifa cinnamoyl CoA	8.72e+02
296	5	5.0	303	1	R46256	Improved Heat-stable c	8.72e+02	369	5	5.0	344	1	Y02670	Human secreted protein	8.72e+02
297	5	5.0	303	1	R46247	Heat-stable carbamylas	8.72e+02	370	5	5.0	344	1	R10864	Lipase modulating fact	8.72e+02
298	5	5.0	303	1	R46260	Improved Heat-stable c	8.72e+02	371	5	5.0	344	1	R77246	P. cepacia lipase acce	8.72e+02
299	5	5.0	303	1	R46241	Heat-stable carbamylas	8.72e+02	372	5	5.0	344	1	R39397	Pseudomonas cepacia DS	8.72e+02
300	5	5.0	303	1	R46272	Improved Heat-stable c	8.72e+02	373	5	5.0	344	1	R39389	Lambda-SM70 encoding M	8.72e+02
301	5	5.0	303	1	R46270	Improved Heat-stable c	8.72e+02	374	5	5.0	346	1	R27576	ABN-A from A. niger.	8.72e+02
302	5	5.0	303	1	R46269	Improved Heat-stable c	8.72e+02	375	5	5.0	348	1	W53920	Decaprenyl diphosphate	8.72e+02
303	5	5.0	303	1	R46258	Improved Heat-stable c	8.72e+02	376	5	5.0	350	1	W98479	H. pylori GHPO 946 pro	8.72e+02
304	5	5.0	303	1	R46265	Improved Heat-stable c	8.72e+02	377	5	5.0	350	1	R63143	Glycoprotein 63 (gp63)	8.72e+02
305	5	5.0	303	1	R46243	Heat-stable carbamylas	8.72e+02	378	5	5.0	351	1	R41542	B15R product.	8.72e+02
306	5	5.0	303	1	R46245	Heat-stable carbamylas	8.72e+02	379	5	5.0	351	1	R24251	Vaccinia virus B18R pr	8.72e+02
307	5	5.0	303	1	R46251	Improved Heat-stable c	8.72e+02	380	5	5.0	352	1	W99556	Protein encoded by clo	8.72e+02
308	5	5.0	303	1	R46267	Improved Heat-stable c	8.72e+02	381	5	5.0	352	1	W55594	H. pylori ORF 09cp6100	8.72e+02
309	5	5.0	303	1	R46255	Improved Heat-stable c	8.72e+02	382	5	5.0	352	1	W71070	Multiple sclerosis ass	8.72e+02
310	5	5.0	303	1	R46252	Heat-stable carbamylas	8.72e+02	383	5	5.0	354	1	W94656	Xenopus WA545 protein.	8.72e+02
311	5	5.0	303	1	R46249	Heat-stable carbamylas	8.72e+02	384	5	5.0	355	1	Y11081	H. pylori ORF hp1p1393	8.72e+02
312	5	5.0	303	1	R25358	KNK-712.	8.72e+02	385	5	5.0	355	1	W20563	H. pylori cell envelo	8.72e+02
313	5	5.0	303	1	R46257	Improved Heat-stable c	8.72e+02	386	5	5.0	357	1	R36479	Sorbitol dehydrogenase	8.72e+02
314	5	5.0	303	1	R46268	Improved Heat-stable c	8.72e+02	387	5	5.0	357	1	W55299	H. pylori ORF 14ge1070	8.72e+02
315	5	5.0	303	1	R46246	Heat-stable carbamylas	8.72e+02	388	5	5.0	357	1	R33440	Ornithine cyclodeamina	8.72e+02

389	5	5.0	358	1	W20735	H. pylori cell envelop	8.72e+02	462	5	5.0	428	1	W87975	Rio Mamore Hantavirus	8.72e+02
390	5	5.0	359	1	W86316	Kidney injury associat	8.72e+02	463	5	5.0	430	1	P70312	Sequence encoded by pr	8.72e+02
391	5	5.0	360	1	W20878	H. pylori cytoplasmic	8.72e+02	464	5	5.0	430	1	R24438	Sequence encoded by pr	8.72e+02
392	5	5.0	361	1	W88979	Polyptide fragment e	8.72e+02	465	5	5.0	430	1	P70224	Sequence of Mucor mieh	8.72e+02
393	5	5.0	364	1	R34764	OMV translation produ	8.72e+02	466	5	5.0	430	1	R62932	Mucor miehei carboxyl	8.72e+02
394	5	5.0	365	1	R12316	HIV-2 env peptide frag	8.72e+02	467	5	5.0	432	1	R94585	DHFR/C. pneumoniae ant	8.72e+02
395	5	5.0	366	1	W35624	H. pylori ORF hp6p1090	8.72e+02	468	5	5.0	434	1	R57434	S-phase kinase associat	8.72e+02
396	5	5.0	366	1	W55625	H. pylori ORF hp6p1090	8.72e+02	469	5	5.0	435	1	W11230	Serine hydroxymethyl t	8.72e+02
397	5	5.0	367	1	R54666	Outer membrane lipopro	8.72e+02	470	5	5.0	435	1	R60500	Linoleic-acid-desatura	8.72e+02
398	5	5.0	367	1	W98294	H. pylori GHPO 1694 pr	8.72e+02	471	5	5.0	435	1	W78193	Human secreted protein	8.72e+02
399	5	5.0	367	1	R98899	Coat protein (long ver	8.72e+02	472	5	5.0	437	1	R06281	Swine enzootic pneumon	8.72e+02
400	5	5.0	370	1	W55233	H. pylori ORF 05gp1190	8.72e+02	473	5	5.0	440	1	R43658	Rhamnolacturonase.	8.72e+02
401	5	5.0	371	1	W55699	H. pylori ORF 06ap1060	8.72e+02	474	5	5.0	440	1	R81708	Recombinant C. albicans	8.72e+02
402	5	5.0	373	1	Y04940	Mycobacterium specie	8.72e+02	475	5	5.0	441	1	R11515	Soybean chlorotic mott	8.72e+02
403	5	5.0	375	1	R26327	Asymmetrically active	8.72e+02	476	5	5.0	441	1	R70209	A. niger alpha-galacto	8.72e+02
404	5	5.0	377	1	W75063	Human secreted protein	8.72e+02	477	5	5.0	442	1	W00505	N.meningitidis IM2394	8.72e+02
405	5	5.0	378	1	W95558	Protein encoded by pET	8.72e+02	478	5	5.0	444	1	W36845	Single chain T-cell re	8.72e+02
406	5	5.0	378	1	R70205	Alpha-galactosidase of	8.72e+02	479	5	5.0	446	1	R37593	Sequence of a plastid	8.72e+02
407	5	5.0	378	1	W00621	Coffee bean alpha-gala	8.72e+02	480	5	5.0	446	1	R60499	Linoleic-acid-desatura	8.72e+02
408	5	5.0	378	1	W41508	Aplysia cAMP-response	8.72e+02	481	5	5.0	446	1	W04725	Aromatic acyl transfer	8.72e+02
409	5	5.0	378	1	W10772	Murine sclerolosis ass	8.72e+02	482	5	5.0	447	1	W96260	Hypersensitive respons	8.72e+02
410	5	5.0	378	1	W60766	Murine Lunatic Pringe	8.72e+02	483	5	5.0	447	1	R48200	Streptococcus pneumoni	8.72e+02
411	5	5.0	378	1	P70542	Sequence encoded by ne	8.72e+02	484	5	5.0	447	1	W61228	Acromonium chrysogenum	8.72e+02
412	5	5.0	378	1	R37591	Sequence of microsomal	8.72e+02	485	5	5.0	447	1	R40226	Homo sapiens fetal kid	8.72e+02
413	5	5.0	381	1	R59623	S. avermitilis BCKDH E	8.72e+02	486	5	5.0	448	1	W95709	Human extracellular ma	8.72e+02
414	5	5.0	383	1	W20913	H. pylori secreted or	8.72e+02	487	5	5.0	448	1	W94281	Beta tubulin of Acremo	8.72e+02
415	5	5.0	385	1	W71490	Helicobacter polypteti	8.72e+02	488	5	5.0	448	1	R56512	Human EEGF protein.	8.72e+02
416	5	5.0	388	1	W62298	Wheat D1 protease.	8.72e+02	489	5	5.0	450	1	W79739	P. gingivalis haemaggl	8.72e+02
417	5	5.0	389	1	W00623	SacI methylase.	8.72e+02	490	5	5.0	450	1	R96021	Haemagglutinin protein	8.72e+02
418	5	5.0	390	1	Y05302	S. aureus protein sequ	8.72e+02	491	5	5.0	450	1	W69489	E. maxima Em70-1 anti	8.72e+02
419	5	5.0	391	1	W37992	Mutant Aspergillus ory	8.72e+02	492	5	5.0	452	1	Y03766	S. aureus MufF polypep	8.72e+02
420	5	5.0	392	1	W31705	Human extracellular/ep	8.72e+02	493	5	5.0	455	1	W37435	Rat hexokinase.	8.72e+02
421	5	5.0	395	1	W71510	Helicobacter polypteti	8.72e+02	494	5	5.0	456	1	R96022	P. gingivalis haemaggl	8.72e+02
422	5	5.0	396	1	W97742	Corn S-adenosylmethion	8.72e+02	495	5	5.0	456	1	R36023	P. gingivalis haemaggl	8.72e+02
423	5	5.0	396	1	W37377	Hepatitis C virus chim	8.72e+02	496	5	5.0	456	1	W69490	Haemagglutinin protein	8.72e+02
424	5	5.0	398	1	W99537	Protein encoded by pET	8.72e+02	497	5	5.0	456	1	R74996	E. maxima Em70-1 anti	8.72e+02
425	5	5.0	398	1	W95515	H. pylori GHPO 1301 pr	8.72e+02	498	5	5.0	456	1	W69491	Haemagglutinin protein	8.72e+02
426	5	5.0	398	1	W171547	Helicobacter polypteti	8.72e+02	499	5	5.0	457	1	W98764	H. pylori GHPO 1103 pr	8.72e+02
427	5	5.0	398	1	W17071	Multiple sclerolosis ass	8.72e+02	500	5	5.0	458	1	W49908	Human brain derived ph	8.72e+02
428	5	5.0	399	1	W05523	HCMV Towne strain UL15	8.72e+02	501	5	5.0	461	1	W14007	Caenorhabditis elegans	8.72e+02
429	5	5.0	400	1	R56281	Chitin-deacetylase.	8.72e+02	502	5	5.0	461	1	W82384	Flea saliva protein Pf	8.72e+02
430	5	5.0	400	1	W61233	Streptococcus pneumoni	8.72e+02	503	5	5.0	461	1	W14006	Caenorhabditis elegans	8.72e+02
431	5	5.0	403	1	W77502	Wild type creatinase.	8.72e+02	504	5	5.0	461	1	W33890	Flea saliva protein Pf	8.72e+02
432	5	5.0	403	1	R72943	Mycobacterium tubercul	8.72e+02	505	5	5.0	464	1	W26496	CD2 associated intrace	8.72e+02
433	5	5.0	403	1	P60274	Sequence of creatine a	8.72e+02	506	5	5.0	464	1	W80420	CD2 associated intrace	8.72e+02
434	5	5.0	403	1	P80680	Creatine amidohydrolas	8.72e+02	507	5	5.0	464	1	W25116	CD2-associated intrace	8.72e+02
435	5	5.0	404	1	W54077	LH-2 protein #1.	8.72e+02	508	5	5.0	466	1	Y06981	Recombinant PHV-210 p	8.72e+02
436	5	5.0	404	1	W72942	Mycobacterium tubercul	8.72e+02	509	5	5.0	470	1	Y05398	Human TIE ligand NL8 p	8.72e+02
437	5	5.0	404	1	R37594	Sequence of plastid de	8.72e+02	510	5	5.0	474	1	W00669	Glutathione synthetase	8.72e+02
438	5	5.0	406	1	R34550	Putative calcium chann	8.72e+02	511	5	5.0	474	1	R14676	Rabbit vitronectin-lik	8.72e+02
439	5	5.0	407	1	R34551	Putative calcium chann	8.72e+02	512	5	5.0	476	1	W46446	Human mature cholesterol	8.72e+02
440	5	5.0	410	1	W53921	Decaprenyl diphosphate	8.72e+02	513	5	5.0	476	1	R20540	Alkaline protease.	8.72e+02
441	5	5.0	411	1	W80133	Arthrobacter sp. creat	8.72e+02	514	5	5.0	476	1	W06127	Human cholesteryl este	8.72e+02
442	5	5.0	411	1	R70206	Alpha-galactosidase of	8.72e+02	515	5	5.0	480	1	R12317	Chimeric HIV-2/HIV-1 e	8.72e+02
443	5	5.0	412	1	Y11085	H. pylori ORF hp5pi557	8.72e+02	516	5	5.0	481	1	Y04145	Rat Tango-76 protein.	8.72e+02
444	5	5.0	412	1	W97051	Protein encoded by ope	8.72e+02	517	5	5.0	488	1	R94579	Chlamydia pneumoniae p	8.72e+02
445	5	5.0	412	1	W89246	Sphingomonas sp. strai	8.72e+02	518	5	5.0	490	1	Y13366	Amino acid sequence of	8.72e+02
446	5	5.0	414	1	R93982	Saccharothrix aerocolo	8.72e+02	519	5	5.0	491	1	R60342	Partial human Lipid tr	8.72e+02
447	5	5.0	416	1	W98286	H. pylori GHPO 1368 pr	8.72e+02	520	5	5.0	493	1	W99553	Protein encoded by clo	8.72e+02
448	5	5.0	416	1	W55613	H. pylori ORF hp4es339	8.72e+02	521	5	5.0	493	1	R48669	Chitinase derivativ #	8.72e+02
449	5	5.0	420	1	R13327	Tau-protein kinase I (8.72e+02	522	5	5.0	493	1	W71068	Multiple sclerolosis ass	8.72e+02
450	5	5.0	420	1	R22215	Sequence of human inte	8.72e+02	523	5	5.0	493	1	W55989	Swinepox virus HindIII	8.72e+02
451	5	5.0	420	1	R71326	Coffee bean alpha-gala	8.72e+02	524	5	5.0	496	1	W76592	Simian immunodeficienc	8.72e+02
452	5	5.0	420	1	R61326	Tau-protein kinase I (8.72e+02	525	5	5.0	496	1	W76589	Simian immunodeficienc	8.72e+02
453	5	5.0	420	1	W82842	Human interleukin-5 re	8.72e+02	526	5	5.0	496	1	W76591	Simian immunodeficienc	8.72e+02
454	5	5.0	420	1	R22219	Sequence of secretory	8.72e+02	527	5	5.0	496	1	W76590	Simian immunodeficienc	8.72e+02
455	5	5.0	421	1	W52084	Human IL-5 receptor al	8.72e+02	528	5	5.0	499	1	W17783	FIV integrase-LexA (F-	8.72e+02
456	5	5.0	421	1	W37376	Hepatitis C virus chim	8.72e+02	529	5	5.0	500	1	W94496	Human delta-2 protein	8.72e+02
457	5	5.0	422	1	W71639	Omega-cyclohexane fatt	8.72e+02	530	5	5.0	502	1	W99668	Human secreted protein	8.72e+02
458	5	5.0	423	1	W54078	LH-2 protein #2.	8.72e+02	531	5	5.0	504	1	Y00225	Enterococcus faecalis	8.72e+02
459	5	5.0	424	1	W77311	Phaffia rhodozyma endo	8.72e+02	532	5	5.0	507	1	W21010	H. pylori chaperone pr	8.72e+02
460	5	5.0	424	1	W97831	Hypersensitive respons	8.72e+02	533	5	5.0	507	1	W15574	Mouse Aiolos polypepti	8.72e+02
461	5	5.0	427	1	Y04941	Mycobacterium specie	8.72e+02	534	5	5.0	508	1	R30875	Prod. of the insert in	8.72e+02

535	5	5.0	511	1	W04539	Vesiculovirus glycopro	8.72e+02	608	5	5.0	575	1	Y00157	Enterococcus faecalis	8.72e+02
536	5	5.0	511	1	W73506	VSV-G protein sequence	8.72e+02	609	5	5.0	577	1	W06827	Newcastle disease viru	8.72e+02
537	5	5.0	512	1	W15274	Salmonella secreted pr	8.72e+02	610	5	5.0	577	1	R39703	Haemagglutinin-neurami	8.72e+02
538	5	5.0	513	1	R79945	Helicobacter pylori an	8.72e+02	611	5	5.0	577	1	R80558	Newcastle's disease vi	8.72e+02
539	5	5.0	517	1	R95852	WD-40 domain-contg. be	8.72e+02	612	5	5.0	578	1	Y09065	Human complement facto	8.72e+02
540	5	5.0	519	1	R72589	A. crysozenum cystathi	8.72e+02	613	5	5.0	579	1	R34401	Sequence of low molecu	8.72e+02
541	5	5.0	522	1	W78488	Human R1P140 ligand bi	8.72e+02	614	5	5.0	579	1	R34446	N.meningitidis 2394 Tb	8.72e+02
542	5	5.0	522	1	R66219	ADP-glucose-pyrophosph	8.72e+02	615	5	5.0	580	1	W02164	Lactococcus lactis sub	8.72e+02
543	5	5.0	527	1	W47207	Homo sapiens tubulin-f	8.72e+02	616	5	5.0	581	1	R58598	Newcastle disease viru	8.72e+02
544	5	5.0	527	1	W1560	Truncated RSV F protei	8.72e+02	617	5	5.0	581	1	W10690	Newcastle disease viru	8.72e+02
545	5	5.0	527	1	W08367	RSV truncated F protei	8.72e+02	618	5	5.0	581	1	R58859	Newcastle Disease Viru	8.72e+02
546	5	5.0	529	1	R07547	Arabidopsis adenylsuc	8.72e+02	619	5	5.0	587	1	Y11082	H. pylori ORF hp46285	8.72e+02
547	5	5.0	530	1	W26428	Swinepox virus HandIII	8.72e+02	620	5	5.0	587	1	Y03204	Amino acid sequence of	8.72e+02
548	5	5.0	531	1	Y05376	Human HCMV inducible g	8.72e+02	621	5	5.0	590	1	Y11093	H. pylori ORF hp61224	8.72e+02
549	5	5.0	532	1	W3127	Truncated rat cadherin	8.72e+02	622	5	5.0	592	1	R26420	Cyclodextrinase.	8.72e+02
550	5	5.0	532	1	W25640	Rat truncated cadherin	8.72e+02	623	5	5.0	594	1	W1506	Helicobacter polytypei	8.72e+02
551	5	5.0	535	1	W77299	Amino acid sequence of	8.72e+02	624	5	5.0	594	1	W48089	Aeromonas caviae polye	8.72e+02
552	5	5.0	537	1	Y04661	L.lactis hsdM subunit	8.72e+02	625	5	5.0	598	1	R12319	HIV-2/HIV-1/HTLV-I chi	8.72e+02
553	5	5.0	538	1	R99854	Human OVCA1 tumour sup	8.72e+02	626	5	5.0	599	1	Y01528	Tbpb sequence from Nei	8.72e+02
554	5	5.0	539	1	W25740	Cotton protophyryrino	8.72e+02	627	5	5.0	599	1	R88644	Neisseria meningitidis	8.72e+02
555	5	5.0	539	1	W41608	Soybean protox-1.	8.72e+02	628	5	5.0	599	1	R48219	N.meningitidis IM2394	8.72e+02
556	5	5.0	539	1	W20778	H. pylori cytoplasmic	8.72e+02	629	5	5.0	599	1	W14620	HTR Tbp2 protein from	8.72e+02
557	5	5.0	541	1	R54842	HERA N-terminal trunca	8.72e+02	630	5	5.0	600	1	R43003	Mycoplasma 74.5kd prot	8.72e+02
558	5	5.0	541	1	R31736	Receptor tyrosine kina	8.72e+02	631	5	5.0	600	1	R09419	Hsp70 antigen of Hscop	8.72e+02
559	5	5.0	541	1	W12695	G-protein parathyroid	8.72e+02	632	5	5.0	600	1	R03922	M.hypneumonitae HSP (M	8.72e+02
560	5	5.0	542	1	W58552	Human excitatory amino	8.72e+02	633	5	5.0	601	1	Y00156	Enterococcus faecalis	8.72e+02
561	5	5.0	542	1	W26600	Human glutamate transp	8.72e+02	634	5	5.0	603	1	Y05277	P. roqueforti beta-fru	8.72e+02
562	5	5.0	542	1	W83922	Human excitatory amino	8.72e+02	635	5	5.0	609	1	W09421	Lettuce polyphenol oxi	8.72e+02
563	5	5.0	543	1	W07085	H. pylori cytoplasmic	8.72e+02	636	5	5.0	616	1	P96147	Sequence of Newcastle	8.72e+02
564	5	5.0	544	1	W28866	Rat brain Neuroglycan	8.72e+02	637	5	5.0	616	1	R06329	Newcastle disease viru	8.72e+02
565	5	5.0	545	1	R41726	Peptide derived from H	8.72e+02	638	5	5.0	621	1	W78420	Arabidopsis thaliana e	8.72e+02
566	5	5.0	547	1	R67385	Mitochondrial protein	8.72e+02	639	5	5.0	621	1	R41230	Taurine transporter.	8.72e+02
567	5	5.0	550	1	Y13383	Amino acid sequence of	8.72e+02	640	5	5.0	622	1	R67424	Alginic acid lyase.	8.72e+02
568	5	5.0	551	1	R77872	SBP65 biotinylated pro	8.72e+02	641	5	5.0	626	1	R37140	Pea plastidial phospho	8.72e+02
569	5	5.0	551	1	R71376	Human cystathionine be	8.72e+02	642	5	5.0	626	1	R71034	N. crassa glucoamylase	8.72e+02
570	5	5.0	552	1	Y00224	Enterococcus faecalis	8.72e+02	643	5	5.0	627	1	Y00235	Enterococcus faecalis	8.72e+02
571	5	5.0	552	1	R26841	Cholesterol oxidase.	8.72e+02	644	5	5.0	633	1	W34470	Human N-acetylglactos	8.72e+02
572	5	5.0	553	1	W68489	Human partial ULIP-4 p	8.72e+02	645	5	5.0	635	1	W55723	H. pylori ORF hp45339	8.72e+02
573	5	5.0	553	1	W26495	CD2 associated intrace	8.72e+02	646	5	5.0	637	1	W77034	Artichoke sucrose fruc	8.72e+02
574	5	5.0	553	1	W25115	CD2-associated intrace	8.72e+02	647	5	5.0	637	1	R63673	Glutamylcysteine-synth	8.72e+02
575	5	5.0	553	1	W80419	CD2 associated intrace	8.72e+02	648	5	5.0	637	1	P92108	Human growth hormone r	8.72e+02
576	5	5.0	558	1	Y03633	Hypoxia-regulated gene	8.72e+02	649	5	5.0	638	1	P92107	Rabbit growth hormone	8.72e+02
577	5	5.0	558	1	W45042	Saccharomyces cerevisi	8.72e+02	650	5	5.0	638	1	W33395	Rabbit growth hormone	8.72e+02
578	5	5.0	558	1	P70429	Murine neuroleukin.	8.72e+02	651	5	5.0	638	1	W33394	Human growth hormone	8.72e+02
579	5	5.0	559	1	W79503	Staphylococcus aureus	8.72e+02	652	5	5.0	638	1	P81327	Rabbit growth hormone	8.72e+02
580	5	5.0	560	1	W80500	Human sodium-lithium c	8.72e+02	653	5	5.0	638	1	W86014	R. rubrum poly-beta-hy	8.72e+02
581	5	5.0	561	1	W97746	Human endogenous retro	8.72e+02	654	5	5.0	638	1	P81326	Human growth hormone r	8.72e+02
582	5	5.0	561	1	W95693	Human endogenous retro	8.72e+02	655	5	5.0	639	1	R47172	Sequence of the inner	8.72e+02
583	5	5.0	562	1	R63588	Full length HA protein	8.72e+02	656	5	5.0	646	1	W55314	H. pylori ORF hp1385	8.72e+02
584	5	5.0	566	1	R08259	Haemagglutinin.	8.72e+02	657	5	5.0	647	1	W73376	Human HPDDV78 protein	8.72e+02
585	5	5.0	566	1	W04271	B.t. neutral protease.	8.72e+02	658	5	5.0	649	1	R94584	DHFR/C. pneumoniae ant	8.72e+02
586	5	5.0	566	1	W13733	Protease NprL.	8.72e+02	659	5	5.0	652	1	R88124	Tobacco mosaic virus r	8.72e+02
587	5	5.0	566	1	W68405	SIV strain HLN1 haemag	8.72e+02	660	5	5.0	657	1	W32095	Porcine retrovirus par	8.72e+02
588	5	5.0	567	1	R25310	Bovine RSV strain FS-1	8.72e+02	661	5	5.0	659	1	W94497	Human delta-2 mature p	8.72e+02
589	5	5.0	568	1	W03325	Newcastle disease viru	8.72e+02	662	5	5.0	660	1	W98211	H. pylori GHPO 761 pro	8.72e+02
590	5	5.0	568	1	W49683	Newcastle disease viru	8.72e+02	663	5	5.0	660	1	W71492	Helicobacter polytypei	8.72e+02
591	5	5.0	568	1	W03551	Newcastle disease viru	8.72e+02	664	5	5.0	660	1	W85453	Pig endogenous retrovi	8.72e+02
592	5	5.0	568	1	W62989	HN protein of Newcastl	8.72e+02	665	5	5.0	661	1	R07504	Merizote apical-end-lo	8.72e+02
593	5	5.0	571	1	W55997	Protein SEQ ID NO:227	8.72e+02	666	5	5.0	662	1	W24576	Merizote apical-end p	8.72e+02
594	5	5.0	571	1	P91960	Haemagglutinin and neu	8.72e+02	667	5	5.0	665	1	R36805	Pseudomonas exotoxin-1	8.72e+02
595	5	5.0	571	1	W49490	Newcastle disease viru	8.72e+02	668	5	5.0	665	1	W20753	H. pylori transporter	8.72e+02
596	5	5.0	572	1	R24189	Bovine RSV strain A 51	8.72e+02	669	5	5.0	668	1	P81186	Sequence encoded by ne	8.72e+02
597	5	5.0	572	1	W75442	Influenza virus A/Texa	8.72e+02	670	5	5.0	668	1	W55709	H. pylori ORF hp45339	8.72e+02
598	5	5.0	572	1	W68488	Mouse ULIP-4 protein.	8.72e+02	671	5	5.0	668	1	P82924	Cowpox virus protein i	8.72e+02
599	5	5.0	572	1	W01670	Influenza A/Texas/36/9	8.72e+02	672	5	5.0	672	1	R66726	Protein kinase C mutan	8.72e+02
600	5	5.0	573	1	W00164	Myosin heavy chain ana	8.72e+02	673	5	5.0	672	1	R94765	Type III (alpha-type)	8.72e+02
601	5	5.0	574	1	W47604	HRSV glycoprotein F.	8.72e+02	674	5	5.0	678	1	R99414	Human gas6 protein, an	8.72e+02
602	5	5.0	574	1	P93562	Sequence of respirator	8.72e+02	675	5	5.0	678	1	W98387	H. pylori GHPO 16 prot	8.72e+02
603	5	5.0	574	1	W81559	Respiratory syncytial	8.72e+02	676	5	5.0	678	1	W46463	Human growth arrest sp	8.72e+02
604	5	5.0	574	1	R21327	Sequence of protein F.	8.72e+02	677	5	5.0	681	1	P90441	Chimeric human respira	8.72e+02
605	5	5.0	574	1	R79894	RS virus fusion protei	8.72e+02	678	5	5.0	683	1	R80573	Human beta-IG-H3 (tran	8.72e+02
606	5	5.0	574	1	R35285	Respiratory syncytial	8.72e+02	679	5	5.0	683	1	R40386	betaIG-H3 protein.	8.72e+02
607	5	5.0	574	1	R25301	HRSV glycoprotein F (g	8.72e+02	680	5	5.0	685	1	W94507	Human delta-2 protein.	8.72e+02

581	5	5.0	585	1	W80813	8.72e+02	Nucleotide sequence of	754	1	W69977	8.72e+02	Staphylococcus aureus
582	5	5.0	587	1	W22458	8.72e+02	Yeast wild-type acetol	755	1	R24042	8.72e+02	Lipoxigenase.
583	5	5.0	687	1	P81152	8.72e+02	Herbicide sensitive, w	756	1	Y00868	8.72e+02	S. tuberosum isoamylas
584	5	5.0	688	1	W43107	8.72e+02	C. thermocellum ORF2p	757	1	W19113	8.72e+02	Potato starch branchin
585	5	5.0	688	1	W06316	8.72e+02	TRP-1 protein.	758	1	W89320	8.72e+02	Stymac239 genome env p
586	5	5.0	702	1	W72184	8.72e+02	HSV-2 strain SB5 Conti	759	1	R24126	8.72e+02	Stymac239 env gene p
587	5	5.0	705	1	W79144	8.72e+02	Receptor protein tyros	760	1	R43959	8.72e+02	N-heparan sulphate sul
588	5	5.0	705	1	W81401	8.72e+02	Receptor protein tyros	761	1	W06399	8.72e+02	Class A starch branchi
589	5	5.0	707	1	W41523	8.72e+02	Blood group antigen bi	762	1	P82677	8.72e+02	ENVRN sequence from HI
590	5	5.0	708	1	R71037	8.72e+02	Draculin.	763	1	R44300	8.72e+02	Human GLUR1B receptor.
591	5	5.0	708	1	W73022	8.72e+02	Helicobacter pylori 76	764	1	R84913	8.72e+02	Human glutamate recept
592	5	5.0	709	1	W58988	8.72e+02	Homo sapiens fetal kid	765	1	R42354	8.72e+02	Human glutamate recept
593	5	5.0	719	1	R45775	8.72e+02	Murine leukaemia inhib	766	1	R84912	8.72e+02	Human glutamate recept
594	5	5.0	719	1	R25069	8.72e+02	MLIF-R.	767	1	W36795	8.72e+02	Novel human protein, d
595	5	5.0	719	1	R49507	8.72e+02	Human LIF-R clone 65.	768	1	R11989	8.72e+02	Glutamate receptor 1.
596	5	5.0	719	1	R74096	8.72e+02	Murine leukaemia inhib	769	1	W69248	8.72e+02	Clone CT97_3 protein
597	5	5.0	720	1	W19286	8.72e+02	Lactobacillus amylovor	770	1	W65023	8.72e+02	Amino acid sequence of
598	5	5.0	722	1	W55104	8.72e+02	Streptococcus pneumonia	771	1	R64974	8.72e+02	Pol region gene produc
599	5	5.0	723	1	W94905	8.72e+02	Mouse pheromone recept	772	1	W37428	8.72e+02	Rat hexokinase I.
600	5	5.0	739	1	W31549	8.72e+02	Bloom's syndrome BLM m	773	1	W37442	8.72e+02	Rat hexokinase I.
601	5	5.0	741	1	W22519	8.72e+02	Glycosyl transferase.	774	1	R50179	8.72e+02	Excitatory amino acid
602	5	5.0	744	1	W19907	8.72e+02	Transmembrane glycopro	775	1	W37440	8.72e+02	Hexokinase-glucokinase
603	5	5.0	745	1	P90615	8.72e+02	Polypeptide with isoam	776	1	W37433	8.72e+02	Hexokinase-glucokinase
604	5	5.0	747	1	W60487	8.72e+02	Human TRIDENT transcri	777	1	W37436	8.72e+02	Hexokinase-glucokinase
605	5	5.0	748	1	W55725	8.72e+02	H. pylori ORF 05ae3022	778	1	W18580	8.72e+02	Potato alpha-glucosida
606	5	5.0	748	1	R24513	8.72e+02	Consensus sequence enc	779	1	W67052	8.72e+02	CGS-PDE isolated from
607	5	5.0	748	1	R24398	8.72e+02	Prod. of the S gene of	780	1	W77040	8.72e+02	Adrenal cortex Ca2+/ca
608	5	5.0	748	1	R24396	8.72e+02	Prod. of the S gene of	781	1	W18048	8.72e+02	Cyclic-GMP-stimulated
609	5	5.0	748	1	W55511	8.72e+02	H. pylori ORF 05ae3022	782	1	W71224	8.72e+02	CGS-PDE encoded by p3C
610	5	5.0	748	1	W98877	8.72e+02	H. pylori GHPO 1750 pr	783	1	R69727	8.72e+02	Cyclic-GMP stimulated
611	5	5.0	749	1	R42466	8.72e+02	Feline infectious peri	784	1	R28407	8.72e+02	CGS-PDE from clone 3CG
612	5	5.0	750	1	P94419	8.72e+02	Primary transcript of	785	1	W96246	8.72e+02	Human semaphorin recep
613	5	5.0	751	1	W61119	8.72e+02	Neutral trehalase 1 (N	786	1	W96248	8.72e+02	Mouse semaphorin recep
614	5	5.0	755	1	W03550	8.72e+02	Partial ORF-3 protein	787	1	W88421	8.72e+02	Chlamydia pneumoniae s
615	5	5.0	756	1	R08405	8.72e+02	Amf105L encoded by Flo	788	1	W88423	8.72e+02	Chlamydia pneumoniae s
616	5	5.0	757	1	W60486	8.72e+02	Mouse TRIDENT transcri	789	1	W88424	8.72e+02	Chlamydia pneumoniae s
617	5	5.0	758	1	R86998	8.72e+02	Enterohaemorrhagic E.c	790	1	R07070	8.72e+02	Fibronectin-binding pr
618	5	5.0	763	1	W55095	8.72e+02	Streptococcus pneumoni	791	1	W18050	8.72e+02	Human CGS-PDE amino ac
619	5	5.0	763	1	W60591	8.72e+02	Human hepatocyte nucle	792	1	W11253	8.72e+02	PHGsg6n cyclic GMP sti
620	5	5.0	766	1	W13385	8.72e+02	Human protein ubiquiti	793	1	W77042	8.72e+02	Cyclic-GMP-stimulated
621	5	5.0	768	1	W36823	8.72e+02	Human E2A-binding prot	794	1	W60754	8.72e+02	Human cyclic-GMP-nucle
622	5	5.0	768	1	W36815	8.72e+02	Human E2A-binding prot	795	1	W71226	8.72e+02	Human CGS-PDE cDNA pro
623	5	5.0	771	1	W60590	8.72e+02	Rat hepatocyte nuclear	796	1	R28409	8.72e+02	Human foetal CGS PDE f
624	5	5.0	776	1	P71568	8.72e+02	Sequence of rotavirus	797	1	W11239	8.72e+02	CGS PDE from bovine br
625	5	5.0	776	1	R24293	8.72e+02	VP4 protein of strain	798	1	W18049	8.72e+02	Cyclic GMP stimulated
626	5	5.0	789	1	R15143	8.72e+02	Haemochus contortus p	799	1	W60753	8.72e+02	CGS-PDE isolated from
627	5	5.0	793	1	W25635	8.72e+02	Human cadherin-8.	800	1	R06376	8.72e+02	Product of the sscl ge
628	5	5.0	793	1	W13132	8.72e+02	Full length human cadh	801	1	W77041	8.72e+02	Yeast inhibitor of apo
629	5	5.0	796	1	W55090	8.72e+02	Streptococcus pneumoni	802	1	W71225	8.72e+02	Bovine brain CGS-PDE s
630	5	5.0	799	1	W25639	8.72e+02	Rat full length cadher	803	1	R69728	8.72e+02	Cyclic-GMP stimulated
631	5	5.0	799	1	W13126	8.72e+02	Full length rat cadher	804	1	W27085	8.72e+02	Human cytomegalovirus
632	5	5.0	804	1	W94914	8.72e+02	Mouse pheromone recept	805	1	W27084	8.72e+02	Human cytomegalovirus
633	5	5.0	810	1	W93003	8.72e+02	Murine IL-4 receptor c	806	1	R06376	8.72e+02	Product of the sscl ge
634	5	5.0	810	1	W60669	8.72e+02	Mouse interleukin-4 re	807	1	W19752	8.72e+02	Yeast inhibitor of apo
635	5	5.0	810	1	W73471	8.72e+02	Mouse interleukin-4 re	808	1	W49874	8.72e+02	Bankia gouldi glycosid
636	5	5.0	810	1	W13498	8.72e+02	Murine interleukin-4 r	809	1	W19969	8.72e+02	Yeast alanyl-tRNA synt
637	5	5.0	810	1	R11255	8.72e+02	Murine IL-4 receptor.	810	1	W70540	8.72e+02	Integrin beta-1 chain.
638	5	5.0	810	1	W48313	8.72e+02	Mouse interleukin-4 re	811	1	W41815	8.72e+02	A. thaliana trehalase
639	5	5.0	810	1	R04574	8.72e+02	Derived amino acid seq	812	1	W72746	8.72e+02	Drosophila kinesin.
640	5	5.0	821	1	R35451	8.72e+02	Mouse epa8.	813	1	W59881	8.72e+02	Amino acid sequence of
641	5	5.0	829	1	R27549	8.72e+02	MCC gene product.	814	1	R42995	8.72e+02	Glycosyltransferase.
642	5	5.0	841	1	W88420	8.72e+02	Chlamydia pneumoniae s	815	1	R42214	8.72e+02	Aspergillus niger gluc
643	5	5.0	842	1	R93804	8.72e+02	Class A starch branchi	816	1	W59360	8.72e+02	C.elegans retinal dege
644	5	5.0	843	1	R67760	8.72e+02	Lys-aminopeptidase Pep	817	1	W37786	8.72e+02	Amino acid sequence of
645	5	5.0	845	1	W36816	8.72e+02	Human E2A-binding prot	818	1	R84660	8.72e+02	Chondroitinase II.
646	5	5.0	847	1	W06400	8.72e+02	Class A starch branchi	819	1	W90075	8.72e+02	P. vulgaris chondroit
647	5	5.0	850	1	W57445	8.72e+02	A. thermophilum thermo	820	1	W39746	8.72e+02	P. vulgaris chondroit
648	5	5.0	852	1	W94904	8.72e+02	Mouse pheromone recept	821	1	R77460	8.72e+02	Chondroitinase-II.
649	5	5.0	855	1	R04029	8.72e+02	Env gene product of CD	822	1	R95268	8.72e+02	Pre-nisin modification
650	5	5.0	856	1	P80803	8.72e+02	Sequence of env protei	823	1	R84658	8.72e+02	STLV-p pol protein.
651	5	5.0	857	1	W13052	8.72e+02	HIV-2 provirus-encoded	824	1	W98498	8.72e+02	H. pylori GHPO 1115 pr
652	5	5.0	858	1	P80806	8.72e+02	Sequence of env protei	825	1	W09398	8.72e+02	Proteus vulgaris chond
653	5	5.0	858	1	P81779	8.72e+02	Sequence encoded by op	826	1	R62535	8.72e+02	P. vulgaris chondroit

827	5	5.0	1013	1	W40224	Human tollloid-like (TL	8.72e+02	900	5	5.0	1385	1	R29516	BT toxin 17a.	8.72e+02
828	5	5.0	1013	1	W40223	Murine mtll protein.	8.72e+02	901	5	5.0	1385	1	R28803	BT toxin 17a.	8.72e+02
829	5	5.0	1015	1	W63675	Polypeptide having age	8.72e+02	902	5	5.0	1385	1	R28026	Bacillus thuringiensis	8.72e+02
830	5	5.0	1028	1	W29667	Homo sapiens DL185_1 c	8.72e+02	903	5	5.0	1385	1	R20066	B.thuringiensis toxin	8.72e+02
831	5	5.0	1031	1	W79062	FIV-NC5U1 clone JSY3 p	8.72e+02	904	5	5.0	1385	1	R76112	PS17a acaricide-active t	8.72e+02
832	5	5.0	1038	1	W36903	Human epididymis-speci	8.72e+02	905	5	5.0	1385	1	R58631	Bacillus thuringiensis	8.72e+02
833	5	5.0	1058	1	R91734	Receptor tyrosine kina	8.72e+02	906	5	5.0	1392	1	R06999	Restin protein sequenc	8.72e+02
834	5	5.0	1058	1	R54843	HER4 with alternate 3'	8.72e+02	907	5	5.0	1400	1	R92705	MLL cDNA clone 14-18B	8.72e+02
835	5	5.0	1088	1	R88635	Plasmid pASK75 open re	8.72e+02	908	5	5.0	1400	1	R44514	MLL amino acid sequenc	8.72e+02
836	5	5.0	1093	1	R65460	AF-17 protein.	8.72e+02	909	5	5.0	1413	1	W20725	H. pylori secreted or	8.72e+02
837	5	5.0	1095	1	R97052	Sequence encoded by in	8.72e+02	910	5	5.0	1416	1	Y00211	Enterococcus faecalis	8.72e+02
838	5	5.0	1095	1	W80359	An F-actin-combined pr	8.72e+02	911	5	5.0	1417	1	W31551	Bloom's syndrome BLM m	8.72e+02
839	5	5.0	1124	1	W53668	FIV PPR clone 34 ORF2	8.72e+02	912	5	5.0	1417	1	W31548	Bloom's syndrome BLM m	8.72e+02
840	5	5.0	1124	1	R24237	Pol polypeptide of FIV	8.72e+02	913	5	5.0	1417	1	W31550	Bloom's syndrome BLM m	8.72e+02
841	5	5.0	1128	1	W36817	Mouse F2A-binding prot	8.72e+02	914	5	5.0	1423	1	R74205	Human death associated	8.72e+02
842	5	5.0	1128	1	R49994	Mouse carboxypeptidase	8.72e+02	915	5	5.0	1423	1	W17367	Death associated prote	8.72e+02
843	5	5.0	1136	1	R93341	Sequence encoded by to	8.72e+02	916	5	5.0	1427	1	R10534	Human L60kD mediator o	8.72e+02
844	5	5.0	1136	1	R82314	Bacillus thuringiensis	8.72e+02	917	5	5.0	1437	1	W80597	Human multidrug resist	8.72e+02
845	5	5.0	1137	1	R42081	Impatiens Necrotic Spo	8.72e+02	918	5	5.0	1437	1	W80597	Human multidrug resist	8.72e+02
846	5	5.0	1140	1	R72386	XAP-1, part of the DNA	8.72e+02	919	5	5.0	1448	1	Y00210	Enterococcus faecalis	8.72e+02
847	5	5.0	1144	1	R76059	Mouse beta-2 integrin al	8.72e+02	920	5	5.0	1454	1	R42473	FIPV/FIPV chimeric spi	8.72e+02
848	5	5.0	1144	1	R88123	Mycoplasma pirum adhes	8.72e+02	921	5	5.0	1454	1	R42478	FECV/FIPV chimeric spi	8.72e+02
849	5	5.0	1144	1	R88123	Tobacco mosaic virus r	8.72e+02	922	5	5.0	1454	1	R42464	Feline infectious peri	8.72e+02
850	5	5.0	1144	1	R88122	Tobacco mosaic virus r	8.72e+02	923	5	5.0	1454	1	R24395	Prod. of the S gene of	8.72e+02
851	5	5.0	1151	1	W95039	Human N-arginine dibas	8.72e+02	924	5	5.0	1454	1	R24511	Prod. of the S genome	8.72e+02
852	5	5.0	1155	1	W60002	Mouse alpha d polypepti	8.72e+02	925	5	5.0	1454	1	R42475	FECV/FIPV chimeric spi	8.72e+02
853	5	5.0	1155	1	W73346	Mouse beta-2 integrin al	8.72e+02	926	5	5.0	1454	1	R42467	Feline enteric coronav	8.72e+02
854	5	5.0	1155	1	W73346	Mouse alpha-d protein s	8.72e+02	927	5	5.0	1454	1	R42477	FECV/FIPV chimeric spi	8.72e+02
855	5	5.0	1155	1	W28335	Mouse alpha-d #1.	8.72e+02	928	5	5.0	1454	1	R42470	Feline infectious peri	8.72e+02
856	5	5.0	1155	1	W23060	Mouse beta-2 integrin	8.72e+02	929	5	5.0	1454	1	R42472	FECV/FIPV chimeric spi	8.72e+02
857	5	5.0	1155	1	R78167	Mouse alpha-d subunit.	8.72e+02	930	5	5.0	1454	1	R42474	Prod. of the S gene of	8.72e+02
858	5	5.0	1161	1	W23061	Mouse beta-2 integrin	8.72e+02	931	5	5.0	1454	1	R24397	FECV/FIPV chimeric spi	8.72e+02
859	5	5.0	1161	1	W65103	Mouse beta-2 integrin al	8.72e+02	932	5	5.0	1456	1	R49042	NMDA receptor channel	8.72e+02
860	5	5.0	1161	1	W73347	Mouse alpha-d protein s	8.72e+02	933	5	5.0	1456	1	W64468	Human secreted protein	8.72e+02
861	5	5.0	1161	1	R78168	Mouse alpha-d subunit.	8.72e+02	934	5	5.0	1464	1	W64229	Potato starch-associat	8.72e+02
862	5	5.0	1161	1	W60003	Mouse alpha d polypepti	8.72e+02	935	5	5.0	1464	1	W14920	Berolonia potato starch	8.72e+02
863	5	5.0	1167	1	W31504	Nematode toxin 167P pr	8.72e+02	936	5	5.0	1464	1	W18792	Starch binding protein	8.72e+02
864	5	5.0	1167	1	W10653	Bacillus thuringiensis	8.72e+02	937	5	5.0	1482	1	R44193	Rat NMDA receptor subu	8.72e+02
865	5	5.0	1168	1	W16326	Nematocidal toxin 167P	8.72e+02	938	5	5.0	1484	1	W55686	H. pylori ORF 07ee5070	8.72e+02
866	5	5.0	1178	1	P60051	Sequence of insecticid	8.72e+02	939	5	5.0	1484	1	W89721	Canine ribosome recept	8.72e+02
867	5	5.0	1186	1	W21694	Bacillus thuringiensis	8.72e+02	940	5	5.0	1594	1	P81183	Sequence of the peplom	8.72e+02
868	5	5.0	1186	1	W31503	Nematode toxin 80JL1 p	8.72e+02	941	5	5.0	1614	1	W83312	Mouse lrp5 protein.	8.72e+02
869	5	5.0	1186	1	R56449	Delta endotoxin from B	8.72e+02	942	5	5.0	1644	1	W25049	BRCA2 cancer susceptib	8.72e+02
870	5	5.0	1186	1	W10652	Bacillus thuringiensis	8.72e+02	943	5	5.0	1671	1	R06341	Signal peptide and fir	8.72e+02
871	5	5.0	1194	1	W91071	Apoptosis inducer Apaf	8.72e+02	944	5	5.0	1732	1	W24787	Prk antigenic protein	8.72e+02
872	5	5.0	1203	1	M15572	Mus dunni endogenous v	8.72e+02	945	5	5.0	1732	1	W69487	Haemagglutinin protein	8.72e+02
873	5	5.0	1203	1	W57315	Human endothelial citr	8.72e+02	946	5	5.0	1732	1	R96029	P. gingivalis porphypa	8.72e+02
874	5	5.0	1203	1	R41668	Human endothelial cell	8.72e+02	947	5	5.0	1757	1	W84351	Murine ubiqlutin-prote	8.72e+02
875	5	5.0	1205	1	W91072	Apoptosis inducer sp1	8.72e+02	948	5	5.0	1849	1	W56573	Toxin TcdAII, encoded	8.72e+02
876	5	5.0	1221	1	R52699	Endothelial nitrogen m	8.72e+02	949	5	5.0	1946	1	W47273	Lactobacillus bulgaric	8.72e+02
877	5	5.0	1253	1	W85244	Sequence translated fr	8.72e+02	950	5	5.0	1969	1	W72419	Rice bacterial leaf bl	8.72e+02
878	5	5.0	1277	1	R52700	Adenyl cyclase-1 (acy-	8.72e+02	951	5	5.0	2008	1	W22016	Utrrophin truncated pol	8.72e+02
879	5	5.0	1287	1	R79944	Plasmid pASK60-Strep r	8.72e+02	952	5	5.0	2016	1	W23994	Human hhl sodium chann	8.72e+02
880	5	5.0	1288	1	W55685	Helicobacter pylori va	8.72e+02	953	5	5.0	2019	1	R67913	Cardiac sodium channel	8.72e+02
881	5	5.0	1288	1	W55685	H. pylori ORF 07ee1140	8.72e+02	954	5	5.0	2020	1	R06584	Cardiac sodium channel	8.72e+02
882	5	5.0	1288	1	W55547	H. pylori ORF 14ee4192	8.72e+02	955	5	5.0	2179	1	P60243	Sequence encoding the	8.72e+02
883	5	5.0	1290	1	W98269	H. pylori GHPO 374 pro	8.72e+02	956	5	5.0	2189	1	R05222	Antigen GX5401FL encod	8.72e+02
884	5	5.0	1294	1	W30601	Human type IX adenylyl	8.72e+02	957	5	5.0	2329	1	W25038	Partial BRCA2 cancer s	8.72e+02
885	5	5.0	1296	1	R41198	CT.	8.72e+02	958	5	5.0	2368	1	W26663	Yeast checkpoint contr	8.72e+02
886	5	5.0	1308	1	R91733	Receptor tyrosine kina	8.72e+02	959	5	5.0	2368	1	W73893	Yeast MEC1 protein seq	8.72e+02
887	5	5.0	1308	1	R54841	HER4.	8.72e+02	960	5	5.0	2408	1	R24306	Translation of ORF 2 c	8.72e+02
888	5	5.0	1311	1	W52197	Precis coenia patched	8.72e+02	961	5	5.0	2471	1	Y06816	Human Notch2 (hum2) p	8.72e+02
889	5	5.0	1311	1	W52197	Precis coenia (butterf	8.72e+02	962	5	5.0	2516	1	W17899	Photobabdu luminesce	8.72e+02
890	5	5.0	1313	1	Y00234	Enterococcus faecalis	8.72e+02	963	5	5.0	2516	1	W56572	Toxin TcdA, encoded by	8.72e+02
891	5	5.0	1313	1	Y00236	Enterococcus faecalis	8.72e+02	964	5	5.0	2625	1	W55887	Human telomerase RNA i	8.72e+02
892	5	5.0	1358	1	R99358	Human restrictin.	8.72e+02	965	5	5.0	2627	1	W61347	Human telomerase	8.72e+02
893	5	5.0	1358	1	W18824	Human restrictin.	8.72e+02	966	5	5.0	2628	1	R96030	P. gingivalis haemaggl	8.72e+02
894	5	5.0	1358	1	W35743	Recombinant human rest	8.72e+02	967	5	5.0	2628	1	W69488	Haemagglutinin protein	8.72e+02
895	5	5.0	1375	1	W21283	Apoptosis inducing pro	8.72e+02	968	5	5.0	2629	1	W55885	Rat telomerase.	8.72e+02
896	5	5.0	1382	1	Y11001	Apoptosis inducing pro	8.72e+02	969	5	5.0	2629	1	W61348	Mouse telomerase RNA i	8.72e+02
897	5	5.0	1385	1	R28889	Toxin 17a.	8.72e+02	970	5	5.0	2721	1	P70647	Sequence of N-terminal	8.72e+02
898	5	5.0	1385	1	R44201	Bacillus thuringiensis	8.72e+02	971	5	5.0	2861	1	W27227	Human TRIO phosphoprot	8.72e+02
899	5	5.0	1385	1	W13884	17a toxin.	8.72e+02	972	5	5.0	2893	1	W71556	Helicobacter polypepti	8.72e+02

973 5 5.0 2893 1 W98828 H. pylori GHPO 1484 pr 8.72e+02
 974 5 5.0 2938 1 R39923 GAP protein lral. 8.72e+02
 975 5 5.0 2963 1 W36444 Fragment HGJ1789 of a 8.72e+02
 976 5 5.0 3014 1 R35207 Hepatitis C virus prot 8.72e+02
 977 5 5.0 3014 1 R34099 NANBHV E1/E2 protein. 8.72e+02
 978 5 5.0 3066 1 W36178 Murine Ataxia-telangle 8.72e+02
 979 5 5.0 3077 1 P93283 Sequence of clone HIV- 8.72e+02
 980 5 5.0 3211 1 P81769 Sequence encoded by to 8.72e+02
 981 5 5.0 3224 1 W34335 Human Nup358 protein. 8.72e+02
 982 5 5.0 3418 1 Y04357 Human BRCA2 (om14) pro 8.72e+02
 983 5 5.0 3418 1 Y04356 Human BRCA2 (om13) pro 8.72e+02
 984 5 5.0 3418 1 Y04358 Human BRCA2 (om15) pro 8.72e+02
 985 5 5.0 3418 1 Y04355 Human BRCA2 (om12) pro 8.72e+02
 986 5 5.0 3418 1 Y04354 Human BRCA2 (om11) pro 8.72e+02
 987 5 5.0 3418 1 W32887 Human breast and ovari 8.72e+02
 988 5 5.0 3418 1 W19211 Human breast cancer su 8.72e+02
 989 5 5.0 3433 1 W22017 Utrophin. 8.72e+02
 990 5 5.0 3588 1 R34712 Bacillus subtilis srfA 8.72e+02
 991 5 5.0 3910 1 R66462 ALL-1 (acute lymphocyt 8.72e+02
 992 5 5.0 3969 1 R32971 Product of the cDNA en 8.72e+02
 993 5 5.0 4472 1 W22601 Ty lactone synthase ORF 8.72e+02
 994 5 5.0 4536 1 W96826 Amino acid sequence of 8.72e+02
 995 5 5.0 4536 1 W41262 Apolipoprotein B-100. 8.72e+02
 996 5 5.0 4545 1 W22611 Hybrid srnc/tylg ORF1 8.72e+02
 997 5 5.0 4550 1 W22606 Platenolide synthase O 8.72e+02
 998 5 5.0 4550 1 W23716 Platenolide synthase O 8.72e+02
 999 5 5.0 4866 1 W77410 Human ryanodin recepto 8.72e+02
 1000 5 5.0 15281 1 R44929 T. niveum Cyclosporin 8.72e+02

ALIGNMENTS

RESULT 1
 ID W80552 standard; Protein; 101 AA.
 AC W80552;
 DT 09-DEC-1998 (first entry)
 DE Antiviral protein, cyanovirin-N.
 KW Cyanovirin-N; recombinant; cyanovirin; cyanobacterium; antiviral;
 OS Nostoc ellipsosporum.
 PN US5821081-A.
 PD 13-OCT-1998.
 PF 26-APR-1996; 638610.
 PR 26-APR-1996; US-638610.
 PS (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PI Boyd MR, Gustafson KR, McMahon JB, Shoemaker RH;
 DR N-PSDB; V56025.
 PS DNA encoding cyanovirin polypeptide(s) - useful for producing recombinant polypeptides with antiviral activity
 PS Claim 1; Fig 2; 33pp; English.
 CC This represents an antiviral protein cyanovirin-N. A vector containing a nucleic acid molecule (V56025 or V56026) can be used to transform a host cell for the recombinant production of the cyanovirin polypeptides.
 CC The cyanovirins are derived from the cyanobacterium Nostoc ellipsosporum, and have antiviral activity, e.g. with EC50 values of 0.4-7.6 nM against various HIV-1 strains and isolates.
 SQ Sequence 101 AA;

Query Match 100.0%; Score 101; DB 1; Length 101;
 Best Local Similarity 100.0%; Pred. No. 2.72e-148;
 Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVINDVGLSKWQPSNFIETCRN 60
 QY 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVINDVGLSKWQPSNFIETCRN 60
 Db 61 TOLAGSSELAACEKTRAQGFVSTKINLDDHIANIDGTLKYE 101
 QY 61 TOLAGSSELAACEKTRAQGFVSTKINLDDHIANIDGTLKYE 101

RESULT 2
 ID W67569 standard; Protein; 101 AA.
 AC W67569;
 DT 02-MAR-1999 (first entry)
 DE N. ellipsosporum cyanovirin protein.
 KW Antiviral protein; cyanovirin; inhibition; infectivity; replication;
 KW cytopathy; virus; HIV; infection.
 OS Nostoc ellipsosporum.
 PN US5843882-A.
 PD 01-DEC-1998.
 PF 27-APR-1995; 429965.
 PR (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PI Boyd MR, Gustafson KR, McMahon JB, Shoemaker RH;
 DR WPI; 99-044625/04.
 DR N-PSDB; V34401.
 PT Nostoc ellipsosporum proteins or peptide(s) - with antiviral activity
 PS Claim 7; Column 25-26; 30pp; English.
 CC This sequence represents an antiviral protein, designated cyanovirin, from Nostoc ellipsosporum. The antiviral protein, or peptide of at least 9 amino acid residues, is used to inhibit the infectivity, replication and cytopathic effects of viruses, especially HIV-1 or HIV-2, in the treatment or prevention of viral infections.
 SQ Sequence 101 AA;

Query Match 100.0%; Score 101; DB 1; Length 101;
 Best Local Similarity 100.0%; Pred. No. 2.72e-148;
 Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVINDVGLSKWQPSNFIETCRN 60
 QY 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVINDVGLSKWQPSNFIETCRN 60
 Db 61 TOLAGSSELAACEKTRAQGFVSTKINLDDHIANIDGTLKYE 101
 QY 61 TOLAGSSELAACEKTRAQGFVSTKINLDDHIANIDGTLKYE 101

RESULT 3
 ID W06811 standard; Protein; 101 AA.
 AC W06811;
 DT 17-MAR-1997 (first entry)
 DE Cyanovirin-N.
 KW Cyanovirin-N; cyanobacterium; antiviral; virucide; HIV-1; HIV-2;
 KW SIV; human immunodeficiency virus; retrovirus; AIDS; therapy.
 OS Nostoc ellipsosporum.
 PN W09634107-A2.
 PD 31-OCT-1996.
 PF 26-APR-1996; U05908.
 PR 27-APR-1995; US-429965.
 PS (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PI Boyd MR, Gustafson KR, McMahon JB, Shoemaker RH;
 DR WPI; 96-497638/49.
 DR N-PSDB; T45978.
 PT Antiviral protein from Nostoc ellipsosporum - used for treating or preventing viral infections, esp. infections caused by retroviruses such as HIV
 PS Claim 2; Page 78; 99pp; English.
 CC Cyanovirin-N (W06811) of Nostoc ellipsosporum shows antiviral activity against immunodeficiency retroviruses, esp. HIV-1, HIV-2 and SIV. It was detected in aq. extracts of the cyanobacterium using an HIV-specific bioassay-guided strategy. It can be obtained by expression in host (esp. yeast, lactobacilli) cells transformed with a vector carrying cyanovirin-N sequences (see also T45978-79). It can also be produced as a conjugate with e.g. a toxin (esp. Pseudomonas exotoxin) or immunological agent. It is used to treat or prevent viral infections, and to prevent the spread of such infections by treating inanimate objects, ex vivo blood, blood products, or tissue.
 SQ Sequence 101 AA;

Query Match 100.0%; Score 101; DB 1; Length 101;


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Best Local Similarity 100.0%; Pred. No. 2.72e-148;
Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVIENVDSGLKWQPSNFIETCRN 60
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QY 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVIENVDSGLKWQPSNFIETCRN 60
|||||

Db 61 TQLAGSSELAEECKTRAQQFVSTKINLDDHIANIDGTLKYE 101
|||||
QY 61 TQLAGSSELAEECKTRAQQFVSTKINLDDHIANIDGTLKYE 101
|||||

RESULT 4
ID W80553 standard; Protein; 109 AA.
AC W80553;
DT 09-DEC-1998 (first entry)
DE Antiviral protein, cyanovirin-N.
KW Cyanovirin-N; recombinant; cyanovirin; cyanobacterium; antiviral;
KW HIV-1.
N-PSDB: V34402.
Nostoc ellipsosporum.
Key Location/Qualifiers
Peptide 1..8
/note= "FLAG octapeptide"
FT US5821081-A.
PN 13-OCT-1998.
PF 26-APR-1996; 638610.
PR 26-APR-1996; US-638610.
PR 27-APR-1995; US-429965.
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PI Boyd MR, Gustafson KR, McMahon JB, Shoemaker RH;
DR WPI: 98-567657/48.
DR N-PSDB: V56026.
PT DNA encoding cyanovirin polypeptide(s) - useful for producing
recombinant polypeptides with antiviral activity
PS Claim 1; Fig 2; 33pp; English.
CC This represents an antiviral protein cyanovirin-N. A vector containing
a nucleic acid molecule (V56025 or V56026) can be used to transform a
host cell for the recombinant production of the cyanovirin polypeptides.
CC The cyanovirins are derived from the cyanobacterium Nostoc ellipsosporum,
CC and have antiviral activity, e.g. with EC50 values of 0.4-7.6 nM against
CC various HIV-1 strains and isolates.
SQ Sequence 109 AA;

Query Match 100.0%; Score 101; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 2.72e-148;
Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 9 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVIENVDSGLKWQPSNFIETCRN 68
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QY 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVIENVDSGLKWQPSNFIETCRN 60
|||||

Db 69 TQLAGSSELAEECKTRAQQFVSTKINLDDHIANIDGTLKYE 109
|||||
QY 61 TQLAGSSELAEECKTRAQQFVSTKINLDDHIANIDGTLKYE 101
|||||

RESULT 5
ID W67570 standard; Protein; 109 AA.
AC W67570;
DT 02-MAR-1999 (first entry)
DE FLAG epitope-cyanovirin fusion protein.
KW Antiviral protein; cyanovirin; inhibition; infectivity; replication;
KW cytopathy; virus; HIV; infection; epitope.
OS Synthetic.
OS Nostoc ellipsosporum.
Key Location/Qualifiers
Region 1..8
/label= FLAG-epitope
FT 10..109
FT /label= cyanovirin_N
PN US5843882-A.
PD 01-DEC-1998.
PF 27-APR-1995; 429965.

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PR 27-APR-1995; US-429965.
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PI Boyd MR, Gustafson KR, McMahon JB, Shoemaker RH;
DR WPI: 99-044625/04.
DR N-PSDB: V34402.
PT Nostoc ellipsosporum proteins or peptide(s) - with antiviral
activity
PS Disclosure; Column 27-28; 30pp; English.
CC This sequence represents a synthetic fusion protein comprising the
CC antiviral protein, designated cyanovirin, from Nostoc ellipsosporum
CC with a FLAG epitope peptide fused at its N-terminus. The antiviral
CC protein, or peptide of at least 9 amino acid residues, is used to
CC inhibit the infectivity, replication and cytopathic effects of viruses,
CC especially HIV-1 or HIV-2, in the treatment or prevention of viral
CC infections.
SQ Sequence 109 AA;

Query Match 100.0%; Score 101; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 2.72e-148;
Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 9 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVIENVDSGLKWQPSNFIETCRN 68
|||||
QY 1 LGKFSQTCYNSAIOGSLVLTSTCERNGYNTSSIDLNSVIENVDSGLKWQPSNFIETCRN 60
|||||

Db 69 TQLAGSSELAEECKTRAQQFVSTKINLDDHIANIDGTLKYE 109
|||||
QY 61 TQLAGSSELAEECKTRAQQFVSTKINLDDHIANIDGTLKYE 101
|||||

RESULT 6
ID W06812 standard; Protein; 109 AA.
AC W06812;
DT 17-MAR-1997 (first entry)
DE FLAG-cyanovirin-N fusion protein.
KW Cyanovirin-N; cyanobacterium; antiviral; virucide; HIV-1; HIV-2;
KW SIV; human immunodeficiency virus; retrovirus; AIDS; therapy.
OS Chimeric Nostoc ellipsosporum;
OS Chimeric synthetic.
FH Key Location/Qualifiers
FT peptide 1..8
FT /label= FLAG
FT protein 9..109
FT /label= Cyanovirin-N
PN W09634107-A2.
PD 31-OCT-1996.
PF 26-APR-1996; U05908.
PR 27-APR-1995; US-429965.
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PI Boyd MR, Gustafson KR, McMahon JB, Shoemaker RH;
DR WPI: 96-497638/49.
DR N-PSDB: T45979.
PT Antiviral protein from Nostoc ellipsosporum - used for treating or
PT preventing viral infections, esp. infections caused by retroviruses
PT such as HIV
PS Example 2; Page 79-80; 99pp; English.
CC A polypeptide (W06812) comprises a FLAG octapeptide fused to the
CC antiviral cyanovirin-N (see also W06811) of Nostoc ellipsosporum.
CC It can be produced in transformed host cells utilising the pFLAG-1
CC vector including a synthetic gene (T45979) and purified using
CC anti-FLAG antibodies. Cyanovirin-N shows antiviral activity
CC against immunodeficiency retroviruses, esp. HIV-1, HIV-2 and SIV.
CC It can also be produced as a conjugate with e.g. a toxin (esp.
CC Pseudomonas exotoxin) or immunological agent. It is used to treat
CC or prevent viral infections, and to prevent the spread of such
CC infections by treating inanimate objects, ex vivo blood, blood
CC prods. or tissue.
SQ Sequence 109 AA;

Query Match 100.0%; Score 101; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 2.72e-148;
Matches 101; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 9 LGKFSQCYNSAIOGSVLTSTCERNTNGYNTSSIDLNSVINDVDSGLKWQPSNFIETCRN 68
 QY 1 LGKFSQCYNSAIOGSVLTSTCERNTNGYNTSSIDLNSVINDVDSGLKWQPSNFIETCRN 60
 Db 69 TQLAGSSELAEECKTRAQQFVSKINLDDHIANIDGTGLKYE 109
 QY 61 TQLAGSSELAEECKTRAQQFVSKINLDDHIANIDGTGLKYE 101

RESULT 7
 ID R95970 standard; peptide; 299 AA.
 AC R95970;
 DT 19-FEB-1997 (first entry)
 DE Nucleic acid recognition unit #6.
 KW Target binding assembly; nucleic acid recognition unit; NF-kappa-B; SPL;
 KW TATA; human papillomavirus; HPV; HPV E2; human immunodeficiency virus;
 KW HIV LTR; Tat binding unit; probe; assembly sequence; asymmetry sequence;
 KW nuclear localisation signal sequence; human cell; HPV LTR; HIV; bacteria;
 KW virus.
 QY Synthetic.
 WO9617956-A2.
 13-JUN-1996.
 PF 07-DEC-1995; U15944.
 PR 09-DEC-1994; US-353476.
 PA (GENE-) GENE POOL INC.
 PI Weininger AM, Weininger S;
 DR WPI; 96-287199/29.
 PT Probe nucleic acids, target binding assemblies, etc - for detection
 PT and localisation of specific nucleic acid sequences, esp. HIV and
 PT HPV
 PS Claim 14; Page 92-93; 172pp; English.
 CC R95965-R95993 represent the nucleic acid recognition units (NAR) of
 CC target binding assemblies (TBA) of the invention. These NARs are
 CC selected from NF-kappa-B, SPL, TATA, human papillomavirus (HPV) E2, HPV
 CC LTR, human immunodeficiency virus (HIV) LTR and Tat binding units. This
 CC sequence represents a NF-kappa-B NAR. The TBA is recognised by the
 CC target binding region (TBR) of a probe of the invention. The probe of
 CC the invention contains a TBR, a booster binding region (BBR), and an
 CC optional support or attachment (OSA). The TBA contains at least one NAR,
 CC and optionally a linker sequence, an assembly sequence, an asymmetry
 CC sequence, a nuclear localisation signal sequence, and an OSA. The
 CC assembly sequence and asymmetry sequences are responsible for the folding
 CC and association of the NARs. The linker sequence is an oligopeptide,
 CC which does not interfere with NAR function, but provides stability and
 CC control over the spacing of the NAR from the rest of the TBA. The OSA is
 CC an attached support or indicator, or other means of localisation of the
 CC probe. The probe can be used in a method for detecting or localising a
 CC specific target nucleic acid sequence (TNA). The method is highly
 CC sensitive, and has a high degree of specificity. The method can be used
 CC for detecting specific nucleic acid sequences, including those found in
 CC human cells, in HIV, HPV, and other nucleic acid containing systems,
 CC including bacteria and viruses.
 CC Sequence 299 AA;

Query Match 7.9%; Score 8; DB 1; Length 299;
 Best Local Similarity 100.0%; Pred. No. 3.39e-01;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 181 SSIDLNSV 188
 QY 32 SSIDLNSV 39

RESULT 8
 ID W20743 standard; protein; 443 AA.
 AC W20743;
 DT 16-JUL-1997 (first entry)
 DE H. pylori cytoplasmic protein, 06e10709orf5.
 KW Cytoplasmic; vaccine; prevention; treatment; infection; identification;
 KW binding compound; bacterium; life cycle; activator; bacteria; inhibitor;
 KW duodenal ulcer disease; chronic gastritis; diagnosis; envelope.
 OS Helicobacter pylori.
 PN WO9640893-A1.

PD 19-DEC-1996.
 PF 06-JUN-1996; U09122.
 PR 07-JUN-1995; US-487032.
 PR 01-APR-1996; US-630405.
 PA (ASTR) ASTRA AB.
 PI Berglindh OT, Smith D, Melligaard BL;
 DR WPI; 97-052306/05.
 DR N-PSDB; T67996.
 PT Helicobacter pylori nucleic acid sequences and related
 PT polypeptide(s) - useful for vaccines to treat or prevent H. pylori
 PT infection, and to detect Helicobacter
 PS Claim 61; Page 1158-1159; 1481pp; English.
 CC The present sequence is a Helicobacter pylori cytoplasmic protein
 CC involved in cofactor metabolism.
 CC The protein may be used in a vaccine to prevent or treat H. pylori
 CC infection or to identify H. pylori polypeptide binding compounds,
 CC useful as potential H. pylori life cycle activators or inhibitors.
 CC The genomic sequence of H. pylori (ATCC 55679) was determined from
 CC overlapping contigs generated by mechanically shearing the bacterial
 CC DNA. The sequences were analysed for ORF of at least 180 nucleotides,
 CC and the predicted coding regions defined by computer evaluation. To
 CC identify likely H. pylori antigens for vaccine development, the amino
 CC acid sequences predicted from various ORF were analysed for significant
 CC homology to other known or exported membrane proteins. Having identified
 CC and determined the sequences of interest, particular regions can be
 CC isolated from H. pylori by PCR amplification for recombinant polypeptide
 CC production, e.g. in E. coli hosts.
 SQ Sequence 443 AA;

Query Match 6.9%; Score 7; DB 1; Length 443;
 Best Local Similarity 100.0%; Pred. No. 5.52e+00;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 330 LNSVIEN 336
 QY 36 LNSVIEN 42

RESULT 9
 ID W14832 standard; peptide; 13 AA.
 AC W14832;
 DT 23-MAY-1997 (first entry)
 DE PDGF-1 oncogene protein residues 1-12 (sic).
 KW Oncogene; monoclonal receptor; antibody; immunoglobulin; ligand;
 KW immunogen; epitope; oncoprotein; detection.
 QY Homo sapiens.
 PS US5030565-A.
 PD 09-JUL-1991.
 PF 15-FEB-1985; 701954.
 PR 17-AUG-1983; US-524084.
 PR 17-AUG-1984; WO-U01304.
 PR 17-AUG-1984; US-001304.
 PR 15-FEB-1985; US-701954.
 PR 16-APR-1987; US-039534.
 PR 18-APR-1991; US-687710.
 PR 17-DEC-1993; US-170649.
 PA (SCRI) SCRIPPS RES INST.
 PI Lerner RA, Niman HL;
 DR WPI; 91-222277/30.
 PT Monoclonal receptors to protein, esp. onco-protein ligands - prepd.
 PT using a polypeptide corresp. to a portion of the protein amino acid
 PT sequence
 PS Disclosure: Page -; 41pp; English.
 CC The sequences given in W14803-32 represent peptides derived from
 CC oncogenes which are bound by the monoclonal receptors of the invention.
 CC The monoclonal receptor molecules are immunoglobulins which bind to
 CC both (a) a protein ligand and (b) a polypeptide having an amino acid
 CC residue sequence containing 7-40 amino acid residues corresponding to a
 CC sequence of a portion of the protein, the receptor molecule having been
 CC raised to an immunogen containing the polypeptide. High yields of
 CC monoclonal receptors can be obtained which bind to or immunoreact with
 CC known predetermined epitopes of protein molecules such as oncoproteins.
 CC The receptors can be used for e.g. detection of oncoprotein ligands or

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CC in affinity sorbants for binding and purifying oncoprotein ligands.
SQ Sequence 13 AA;

Query Match 5.9%; Score 6; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 8 ABECKTR 13
   |||||
Qy 71 ABECKTR 76

RESULT 10
ID W79087 standard; Protein; 48 AA.
AC W79087;
DT 11-JAN-1999 (first entry)
DE Human secreted protein bd164_7.
KW Secreted protein; human; bd164_7.
OS Homo sapiens.
   WO9841539-A2.
   24-SEP-1998.
PR 19-MAR-1998; U05474.
PR 18-MAR-1998; US-040963.
PA (GEM ) GENETICS INST INC.
PI Agostino MJ, Jacobs K, LaVallie ER, McCoy JM, Merberg D,
PI Racie LA, Spaulding V, Treacy M;
WPI: 98-521163/44.
DR N-PSDB; V61477.
PT New polynucleotide(s) encoding secreted human proteins - derived
PT from human foetal kidney, adult testes and adult or foetal brain
PT cDNA libraries
PS Claim 9; Page 67; 112pp; English.
CC This is the amino acid sequence of a novel human secreted protein,
CC designated bd164_7. The sequence was deduced from a full-length
CC cDNA clone (see V61477) obtained from a foetal kidney cDNA
CC library. The protein shows some homology to database sequences.
CC The invention provides cDNA clones (see V61477-87) from human
CC foetal kidney, adult testis, and adult or foetal brain cDNA
CC libraries that code for secreted proteins (see W79087-97). These
CC clones are deposited as ATCC 98364. The polynucleotides and
CC proteins are predicted to have useful biological activities which
CC would make them suitable for treating, preventing or ameliorating
CC medical conditions in humans and animals, although no supporting
CC data is given. Suggested activities include nutritional, immune
CC stimulating (e.g. as vaccines) or suppressing, haematopoiesis
CC regulating, tissue growth, activin/inhibin, chemotactic/chemokinetic,
CC haemostatic and thrombolytic, receptor/ligand, antiinflammatory,
CC cadherin/tumour invasion suppressor and tumour inhibition
CC activities.
SQ Sequence 48 AA;

Query Match 5.9%; Score 6; DB 1; Length 48;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 TCRNTQ 19
   |||||
Qy 57 TCRNTQ 62

RESULT 11
ID R25443 standard; Protein; 109 AA.
AC R25443;
DT 13-JAN-1993 (first entry)
DE PDGF analogue #3.
KW platelet derived growth factor; chemotactic; mitogenic; fibroblasts;
KW wound healing; dermal ulcers; lacerations; abrasions;
KW surgical wounds; burns; defined culture media; v-sis protein; p28sis;
KW neoplasia; cancer; tumour; inhibit atherosclerosis.
OS Synthetic.
FH key Location/Qualifiers
FT region 26..34

CC in affinity sorbants for binding and purifying oncoprotein ligands.
SQ Sequence 13 AA;

Query Match 5.9%; Score 6; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 8 ABECKTR 13
   |||||
Qy 71 ABECKTR 76

RESULT 10
ID W79087 standard; Protein; 48 AA.
AC W79087;
DT 11-JAN-1999 (first entry)
DE Human secreted protein bd164_7.
KW Secreted protein; human; bd164_7.
OS Homo sapiens.
   WO9841539-A2.
   24-SEP-1998.
PR 19-MAR-1998; U05474.
PR 18-MAR-1998; US-040963.
PA (GEM ) GENETICS INST INC.
PI Agostino MJ, Jacobs K, LaVallie ER, McCoy JM, Merberg D,
PI Racie LA, Spaulding V, Treacy M;
WPI: 98-521163/44.
DR N-PSDB; V61477.
PT New polynucleotide(s) encoding secreted human proteins - derived
PT from human foetal kidney, adult testes and adult or foetal brain
PT cDNA libraries
PS Claim 9; Page 67; 112pp; English.
CC This is the amino acid sequence of a novel human secreted protein,
CC designated bd164_7. The sequence was deduced from a full-length
CC cDNA clone (see V61477) obtained from a foetal kidney cDNA
CC library. The protein shows some homology to database sequences.
CC The invention provides cDNA clones (see V61477-87) from human
CC foetal kidney, adult testis, and adult or foetal brain cDNA
CC libraries that code for secreted proteins (see W79087-97). These
CC clones are deposited as ATCC 98364. The polynucleotides and
CC proteins are predicted to have useful biological activities which
CC would make them suitable for treating, preventing or ameliorating
CC medical conditions in humans and animals, although no supporting
CC data is given. Suggested activities include nutritional, immune
CC stimulating (e.g. as vaccines) or suppressing, haematopoiesis
CC regulating, tissue growth, activin/inhibin, chemotactic/chemokinetic,
CC haemostatic and thrombolytic, receptor/ligand, antiinflammatory,
CC cadherin/tumour invasion suppressor and tumour inhibition
CC activities.
SQ Sequence 48 AA;

Query Match 5.9%; Score 6; DB 1; Length 48;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 TCRNTQ 19
   |||||
Qy 57 TCRNTQ 62

RESULT 11
ID R25443 standard; Protein; 109 AA.
AC R25443;
DT 13-JAN-1993 (first entry)
DE PDGF analogue #3.
KW platelet derived growth factor; chemotactic; mitogenic; fibroblasts;
KW wound healing; dermal ulcers; lacerations; abrasions;
KW surgical wounds; burns; defined culture media; v-sis protein; p28sis;
KW neoplasia; cancer; tumour; inhibit atherosclerosis.
OS Synthetic.
FH key Location/Qualifiers
FT region 26..34

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FT FT US5128321-A. /note= "amino acids from corresponding A chain
PN 07-JUL-1992. sequence"
PD 08-AUG-1988; 230190.
PF 12-OCT-1984; US-660496.
PR 25-FEB-1985; US-705175.
PR 13-AUG-1986; US-896485.
PR 15-DEC-1986; US-941970.
PA (ZYMO ) ZYMOGENETICS INC.
PI Kelly JD, Murray MJ;
DR WPI: 92-249442/30.
PT New platelet-derived growth factor analogues - comprising protein
PT homo:dimers having two polypeptide chains with sequences the same
PT as the A- and opt. B chain obtd. in large amts. used to enhance the
PT healing of wounds
PS Disclosure; Fig 3A; 25pp; English.
CC This sequence represents a new platelet-derived growth factor
CC analogue chain . The analogue functions as a homodimer of two chains,
CC each of the chains being a mosaic of amino acid sequences identical
CC to portions of the A- or B-chains of PDGF, the protein being
CC chemotactic or mitogenic for fibroblasts. The homodimers have the
CC same biological activity as PDGF, but can be obtained in large
CC amts. by recombinant DNA techniques. These PDGF analogues can be
CC used in a compsn. to enhance the healing of wounds eg. dermal
CC ulcers, superficial wounds and lacerations, abrasions, surgical
CC wounds and some burns. The PDGF analogues can also be used as
CC components of defined, serum-free culture media. They can also be
CC used in elucidating the putative role of the v-sis protein p28sis
CC in the neoplastic process or for developing inhibitors or
CC designing specific therapeutic approaches which prevent or
CC interfere with the in vivo activity of PDGF in individuals with
CC atherosclerosis. This sequence is a B chain coding sequence
CC which has been altered by replacing amino acids 26-34 with the
CC corresponding A chain amino acids.
SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 ABECKTR 19
   |||||
Qy 71 ABECKTR 76

RESULT 12
ID R42810 standard; Protein; 109 AA.
AC R42810;
DT 04-MAY-1994 (first entry)
DE Mature human PDGF-B.
KW Platelet-derived growth factor; monomeric; binding; inhibition;
KW stenosis; restenosis; antiproliferative; invasive cardiovascular;
KW procedures.
OS Homo sapiens.
PN WO9320204-A.
PD 14-OCT-1993.
PF 26-MAR-1993; U02612.
PR 30-MAR-1992; US-860711.
PA (SCHE ) SCHERING CORP.
PI Cable MB, Hesson TE, Mannarino AF;
DR WPI: 93-336912/42.
PT Monomeric platelet-derived growth factor - useful for preventing
PT stenosis or restenosis following invasive cardiovascular procedures
PS Disclosure; Page 27; 41pp; English.
CC The sequence is that of the mature form of monomeric human
CC platelet-derived growth factor (PDGF-B). It is identical to a
CC subsequence of the c-sis protein (Ratner et al. 1985).
SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 14 AECKTR 19
| | | | |
QY 71 AECKTR 76

RESULT 13
ID P81030 standard; Protein; 109 AA.

AC P81030;
DT 29-MAR-1992 (first entry)
DE Sequence of mature B-chain of platelet derived growth factor
DE (PDGF).
KW Wound healing; fibroblast; mammalian cell culture.

OS Homo sapiens.

PN EP-259632-A.

PD 16-MAR-1988.

PF 11-AUG-1987; 111591.

PR 12-OCT-1984; US-660496.

PR 23-FEB-1985; US-705175.

PR 13-AUG-1986; US-896485.

PR 15-DEC-1986; US-942484.

PR 15-DEC-1986; US-942161.

PR 15-DEC-1986; US-941970.

PA (ZYMO-) ZYMOGENETICS INC.

PI Murray MJ, Kelly JD;

DR WPI; 88-072136/11.

PT Platelet-derived growth factor analogues - prep'd. using DNA

PT constructs contg. a transcriptional promoter followed by A and/or

PT B chain coding sequences

PS Disclosure; Fig 9; 88pp; English.

CC Computer analysis of a partial AA SQ of platelet derived growth
CC factor (PDGF) has revealed extensive homology with the gene product,
CC p28sis, of simian sarcoma virus (SSV). Human PDGF A-chain and
CC B-chain cDNAs are isolated from a human cDNA library using the v-sis
CC gene or a fragment as a hybridisation probe. The inventors claim
CC RNA constructs for the prodn. of PDGF analogues in eucaryotic cells,
CC esp. yeast. The PDGF analogues comprise PDGF A-chains and B-chains
CC as monomers and as heterodimers. A protein having two polypeptide
CC chains, one of said chains being a mosaic of AA SQs substantially
CC identical to portions of the A- or B-chains of PDGF, the second of
CC said chains being substantially homologous to the B-chain of PDGF
CC is also claimed.

SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

14 AECKTR 19
| | | | |
QY 71 AECKTR 76

RESULT 14

ID R20967 standard; peptide; 109 AA.

AC R20967;

DT 20-MAY-1992 (first entry)

DE Sequence of B-chain of native human platelet derived growth factor

DE (PDGF).

KW Wound healing; proteolysis-resistant; platelet derived growth factor.

OS Homo sapiens.

PN WO9201716-A.

PD 06-FEB-1992.

PF 22-JUL-1991; U05183.

PF 23-JUL-1990; US-557219.

PA (ZYMO-) ZYMOGENETICS INC.

PI Murray MJ;

DR WPI; 92-064894/08.

DR New protease resistant platelet derived growth factor-like

PT proteins - comprising mutated B chain linked to native A or B

PT chain, useful in wound healing

PS Disclosure; Fig 1; 43pp; English.

CC The inventors claim a PDGF B-chain having a substitution or deletion

CC at posn. 27, 28, 32, 79, 80 or 81. Also claimed are a PDGF-like
CC protein comprising an altered B-chain bonded to PDGF A-chain or
CC another B-chain, and a DNA molecule encoding the B-chain. The
CC mutation of the B-chain pref. comprises substitution of Arg 28 or 32
CC with one of Pro, Ser, Trp, Gln, His, Met or Asn. The PDGF-like
CC proteins are resistant to proteolysis and therefore are homogeneous.
SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECKTR 19
| | | | |
QY 71 AECKTR 76

RESULT 15

ID R87515 standard; peptide; 109 AA.

AC R87515;

DT 21-JUN-1996 (first entry)

DE PDGF mosaic peptide B26.

KW Platelet-derived growth factor; PDGF; unglycosylated protein; burn;

KW wound healing; non-healing dermal ulcer; superficial wound; laceration;

KW abrasion; surgical wound; advanced age; diabetes; cancer; steroid;

KW anti-inflammatory drug; anticoagulant; homodimer.

OS Synthetic.

PH Key Location/Qualifiers

FT region 1..25

FT /note= "PDGF B chain fragment"

FT region 26..34

FT /note= "PDGF A chain residues 26-34"

FT region 35..109

FT /note= "PDGF B chain fragment"

PN US5474982-A.

PD 12-DEC-1995.

PF 13-AUG-1986; 896485.

PR 13-AUG-1986; US-896485.

PR 15-DEC-1986; US-941970.

PR 08-AUG-1988; US-230190.

PR 30-JUN-1992; US-906544.

PR 12-JUL-1994; US-273779.

PA (ZYMO) ZYMOGENETICS INC.

PI Kelly JD, Murray MJ;

DR WPI; 96-039529/04.

PT New platelet-derived growth factor analogues - useful for promoting

PT wound healing

PS Example 2; Fig 3a; 25pp; English.

CC R87513-R87521 are representative peptides of the invention. These

CC sequences are all mosaics of the platelet-derived growth factor (PDGF) A

CC chain. This sequence has residues 26-34 of the B chain sequences are

CC replaced by the corresponding A chain residues. These sequences are

CC used to form the novel unglycosylated protein homodimers of the

CC invention. These homodimers can be used in compositions for enhancing

CC the wound healing process. The protein is expected to accelerate the

CC healing process in a broad spectrum of wound conditions including

CC disruptions of the dermal layer of the skin (such as non-healing dermal

CC ulcers, superficial wounds and lacerations, abrasions, surgical wounds,

CC and some burns). These sequences are especially used in enhancing the

CC wound-healing process in conditions where the normal wound healing

CC process is suppressed or inhibited, such as advanced age, diabetes,

CC cancer, and treatment with anti-inflammatory drugs, steroids or

CC anticoagulants.

SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECKTR 19
| | | | |
QY 71 AECKTR 76

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RESULT 16
ID R25673 standard; peptide; 109 AA.
AC R25673;
DT 15-JAN-1993 (first entry)
DE PDGF-B.
KW c-sis; pharmaceutical compositions; wound healing.
OS Homo sapiens.
PN EP-495638-A.
PD 22-JUL-1992.
PF 15-JAN-1992; 300330.
PR 16-JAN-1991; US-641345.
PA (SCHE ) SCHERING CORP.
PI Alexander DM, Cable MB, Dalie BL, Narula SK;
DR WPI; 92-243474/30.
PT Expression of mature human platelet derived growth factor-B -
PT e.g. using plasmid pTAcBlq in E. coli
PS Disclosure; Page 12; 19pp; English.
CC This sequence is an unglycosylated, biologically active, mature
CC human platelet derived growth factor-B (PDGF-B). This sequence is
CC identical to the sequence of c-sis. This sequence can be used for
CC any medical condition susceptible to treatment by known PGDF's.
CC Pharmaceutical compositions for such uses comprise an effective
CC amount of the PDGF-B and a carrier. It can be used for wound
CC healing and to treat skin damaged by cuts, abrasions, sun, wind, etc.
SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 ABECKTR 19
QY 71 ABECKTR 76

RESULT 17
ID R15643 standard; Protein; 109 AA.
AC R15643;
DT 11-FEB-1992 (first entry)
DE PDGF B-chain polypeptide
KW Platelet derived growth factor; burns; ulcers; radiation wounds.
OS Homo sapiens.
PN WO9116335-A.
PD 31-OCT-1991.
PF 25-APR-1991; U02766.
PR 26-APR-1990; US-515474.
PA (CHIR-) CHIRON CORP.
PI Nascimento CG, Calderoncacia MD;
DR N-PSDB; Q15184.
PT New hyper-glycosylated platelet derived growth factor - obtained
PT from yeast, used to treat burns, radiation wounds and ulcers such as
PT decubitus and cutaneous ulcers
PS Disclosure; Fig 3; 79pp; English.
CC The amino acid sequence encodes human platelet derived growth factor
CC (PDGF) B-chain polypeptide. This forms part of the hyper-glycosylated
CC (PDGF) B-chain polypeptide. This has as three times the mitogenic activity as
CC that of less glycosylated PDGF. This can be applied topically to
CC wounds such as cutaneous, dermal, mucosal or epithelial wounds in
CC humans or animals. It can be used to treat burns, radiation wounds
CC and ulcers such as decubiti and cutaneous ulcers caused by vascular,
CC haematologic and metabolic diseases, infections or neoplasms. See
CC also R15644 and R15645.
SQ Sequence 109 AA;

Query Match 5.9%; Score 6; DB 1; Length 109;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 ABECKTR 19
QY 71 ABECKTR 76

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RESULT 18
ID R87517 standard; peptide; 110 AA.
AC R87517;
DT 21-JUN-1996 (first entry)
DE PDGF mosaic peptide B/A54.
KW platelet-derived growth factor; PDGF; unglycosylated protein; burn;
KW wound healing; non-healing dermal ulcer; superficial wound; laceration;
KW abrasion; surgical wound; advanced age; diabetes; cancer; steroid;
KW anti-inflammatory drug; anticoagulant; homodimer.
OS Synthetic.
FH Key Location/Qualifiers
FT region 1..54
FT /note= "PDGF B chain fragment"
FT region 55..104
FT /note= "PDGF A chain residues 49-104"
PN US5474982-A.
PD 12-DEC-1995.
PR 13-AUG-1986; 896485.
PR 15-DEC-1986; US-896485.
PR 08-AUG-1988; US-941970.
PR 30-JUN-1992; US-906544.
PR 12-JUL-1994; US-273779.
PA (ZYMO ) ZYMOGENETICS INC.
PI Kelly JD, Murray MJ;
DR WPI; 96-039529/04.
PT New platelet-derived growth factor analogues - useful for promoting
PT wound healing
PS Example 2; Fig 3b; 25pp; English.
CC R87513-R87521 are representative peptides of the invention. These
CC sequences are all mosaics of the platelet-derived growth factor (PDGF) A
CC chain. This sequence has residues 1-54 of the B chain sequence, followed
CC by residues 49-104 of the A chain sequence. These sequences are used to
CC form the novel unglycosylated protein homodimers of the invention. These
CC homodimers can be used in compositions for enhancing the wound healing
CC process. The protein is expected to accelerate the healing process in a
CC broad spectrum of wound conditions including disruptions of the dermal
CC layer of the skin (such as non-healing dermal ulcers, superficial wounds
CC and lacerations, abrasions, surgical wounds, and some burns). These
CC sequences are especially used in enhancing the wound-healing process in
CC conditions where the normal wound healing process is suppressed or
CC inhibited, such as advanced age, diabetes, cancer, and treatment with
CC anti-inflammatory drugs, steroids or anticoagulants.
SQ Sequence 110 AA;

Query Match 5.9%; Score 6; DB 1; Length 110;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 ABECKTR 19
QY 71 ABECKTR 76

RESULT 19
ID R25445 standard; Protein; 110 AA.
AC R25445;
DT 13-JAN-1993 (first entry)
DE PDGF analogue #5.
KW platelet derived growth factor; chemotactic; mitogenic; fibroblasts;
KW wound healing; dermal ulcers; lacerations; abrasions;
KW surgical wounds; burns; defined culture media; v-sis protein; p28sis;
KW neoplasm; cancer; tumour; inhibit atherosclerosis.
OS Synthetic.
FH Key Location/Qualifiers
FT region 1..54
FT /note= "B chain amino acids"
FT region 55..110
FT /note= "A chain amino acids"
PN US5128321-A.
PD 07-JUL-1992.

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PF 08-AUG-1988; 230190.
 PR 12-OCT-1984; US-660496.
 PR 25-FEB-1985; US-705175.
 PR 13-AUG-1986; US-896485.
 PR 15-DEC-1986; US-941970.
 PA (ZYMO) ZYMOGENETICS INC.
 PI Kelly JD, Murray MJ;
 DR WPI; 92-249442/30.
 PT New platelet-derived growth factor analogues - comprising protein
 PT homo:dimers having two polypeptide chains with sequences the same
 PT as the A- and opt. B chain obtd. in large amts. used to enhance the
 PT healing of wounds
 PS Disclosure; Fig 3A; 25pp; English.
 CC This sequence represents a new platelet-derived growth factor
 CC analogue chain . The analogue functions as a homodimer of two chains,
 CC each of the chains being a mosaic of amino acid sequences identical
 CC to portions of the A- or B-chains of PDGF, the protein being
 CC chemotactic or mitogenic for fibroblasts. The homodimers have the
 CC same biological activity as PDGF, but can be obtained in large
 CC amts. by recombinant DNA techniques. These PDGF analogues can be
 CC used in a compsn. to enhance the healing of wounds eg. dermal
 CC ulcers, superficial wounds and lacerations, abrasions, surgical
 CC wounds and some burns. The PDGF analogues can also be used as
 CC components of defined, serum-free culture media. They can also be
 CC used in elucidating the putative role of the vsis protein p28sis
 CC in the neoplastic process or for developing inhibitors or
 CC designing specific therapeutic approaches which prevent or
 CC interfere with the in vivo activity of PDGF in individuals with
 CC atherosclerosis. This sequence is B chain amino acids 1-54
 CC which have been joined to A chain amino acids 49-104.
 SQ Sequence 110 AA;

Query Match 5.9%; Score 6; DB 1; Length 110;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECKTR 19
 |||||
 QY 71 AECKTR 76

RESULT 20
 ID R25444 standard; Protein; 110 AA.
 AC R25444;
 DT 13-JAN-1993 (first entry)
 DE PDGF analogue #4.
 KW platelet derived growth factor; chemotactic; mitogenic; fibroblasts;
 KW wound healing; dermal ulcers; lacerations; abrasions;
 KW surgical wounds; burns; defined culture media; v-sis protein; p28sis;
 KW neoplasm; cancer; tumour; inhibit atherosclerosis.
 OS Synthetic.
 FH Key
 FT region 1..53 Location/Qualifiers
 FT /note= "B chain amino acids"
 FT 54..110
 FT /note= "A chain amino acids"
 FT US5128321-A.
 PN 07-JUL-1992.
 PD 08-AUG-1988; 230190.
 PF 12-OCT-1984; US-660496.
 PR 25-FEB-1985; US-705175.
 PR 13-AUG-1986; US-896485.
 PR 15-DEC-1986; US-941970.
 PA (ZYMO) ZYMOGENETICS INC.
 PI Kelly JD, Murray MJ;
 DR WPI; 92-249442/30.
 PT New platelet-derived growth factor analogues - comprising protein
 PT homo:dimers having two polypeptide chains with sequences the same
 PT as the A- and opt. B chain obtd. in large amts. used to enhance the
 PT healing of wounds
 PS Disclosure; Fig 3A; 25pp; English.
 CC This sequence represents a new platelet-derived growth factor
 CC analogue chain . The analogue functions as a homodimer of two chains,

CC each of the chains being a mosaic of amino acid sequences identical
 CC to portions of the A- or B-chains of PDGF, the protein being
 CC chemotactic or mitogenic for fibroblasts. The homodimers have the
 CC same biological activity as PDGF, but can be obtained in large
 CC amts. by recombinant DNA techniques. These PDGF analogues can be
 CC used in a compsn. to enhance the healing of wounds eg. dermal
 CC ulcers, superficial wounds and lacerations, abrasions, surgical
 CC wounds and some burns. The PDGF analogues can also be used as
 CC components of defined, serum-free culture media. They can also be
 CC used in elucidating the putative role of the vsis protein p28sis
 CC in the neoplastic process or for developing inhibitors or
 CC designing specific therapeutic approaches which prevent or
 CC interfere with the in vivo activity of PDGF in individuals with
 CC atherosclerosis. This sequence is B chain amino acids 1-53
 CC which have been joined to A chain amino acids 48-104.
 SQ Sequence 110 AA;

Query Match 5.9%; Score 6; DB 1; Length 110;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECKTR 19
 |||||
 QY 71 AECKTR 76

RESULT 21
 ID R68619 standard; Protein; 110 AA.
 AC R68619;
 DT 01-SEP-1995 (first entry)
 DE Mature human PDGF-B.
 KW Platelet-derived growth factor beta; PDGF-B; precursor; multimer;
 KW multicistronic expression unit; recombinant protein production.
 OS Homo sapiens.
 OS DE4319708-A.
 PD 15-DEC-1994.
 PF 10-JUN-1993; 319708.
 PR 10-JUN-1993; DE-319708.
 PA (BEIE) BEIERSDORF AG.
 PA (GBFB) GBF GES BIOTECH FORSCHUNG GMBH.
 PI Eichner W, McCarthy JEG, Schneppe B;
 DR WPI; 95-023815/04.
 DR N-PSDB; Q80480.
 DR Recombinant multimeric protein prodn. in bacteria - transfected
 PT with vector contg. new multi-cistronic expression unit, providing
 PT high level prodn. of pharmaceutical and cosmetic products
 PS Claim 11; Page 30; 42pp; German.
 CC Plasmid pmw-2 contains the cDNA of the human PDGF-B gene, but with
 CC the 5'-translated region of the precursor being incomplete. The
 CC BamHI/NcoI fragment of pmw-2 was used as the basis for mutagenesis
 CC to isolate the sequence coding for mature PDGF-B with a Met residue
 CC at the N-terminus (R68619). The mutagenised coding sequence (Q80480)
 CC was used in the construction of multicistronic expression units for
 CC recombinant expression of the PDGF-A/B dimer in bacteria.
 SQ Sequence 110 AA;

Query Match 5.9%; Score 6; DB 1; Length 110;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 15 AECKTR 20
 |||||
 QY 71 AECKTR 76

RESULT 22
 ID R87516 standard; peptide; 110 AA.
 AC R87516;
 DT 21-JUN-1996 (first entry)
 DE PDGF mosaic peptide B/A53.
 KW Platelet-derived growth factor;
 KW wound healing; non-healing dermal ulcer; superficial wound; laceration;
 KW abrasion; surgical wound; advanced age; diabetes; cancer; steroid;

KW anti-inflammatory drug; anticoagulant; homodimer.

OS Synthetic.

FH Key Location/Qualifiers

FT region 1. 53

FT /note= "PDGF B chain fragment"

FT region 54. 110

FT /note= "PDGF A chain fragment"

PN US5474982-A.

PD 12-DEC-1995.

PF 13-AUG-1986; 896485.

PR 13-AUG-1986; US-896485.

PR 15-DEC-1986; US-941970.

PR 08-AUG-1988; US-230190.

PR 30-JUN-1992; US-906544.

PR 12-JUL-1994; US-273779.

PA (ZYMO) ZYMOGENETICS INC.

PI Kelly JD, Murray MJ;

DR WPI; 96-039529/04.

PT New platelet-derived growth factor analogues - useful for promoting

PT wound healing

CC Example 2; Fig 3a; 25pp; English.

CC R87513-R87521 are representative peptides of the invention. These sequences are all mosaics of the platelet-derived growth factor (PDGF) A chain. This sequence has residues 1-53 of the B chain sequences, followed by residues 48-104 of the A chain sequence. These sequences are used to form the novel unglycosylated protein homodimers of the invention. These homodimers can be used in compositions for enhancing the wound healing process. The protein is expected to accelerate the healing process in a broad spectrum of wound conditions including disruptions of the dermal layer of the skin (such as non-healing dermal ulcers, superficial wounds and lacerations, abrasions, surgical wounds, and some burns). These sequences are especially used in enhancing the wound-healing process in conditions where the normal wound healing process is suppressed or inhibited, such as advanced age, diabetes, cancer, and treatment with anti-inflammatory drugs, steroids or anticoagulants.

SQ Sequence 110 AA;

Query Match 5.9%; Score 6; DB 1; Length 110;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECTR 19

QY 71 AECTR 76

RESULT 23

P80163 standard; protein; 114 AA.

P80163;

DE 16-NOV-1990 (first entry)

KW Biosynthetic multifunctional protein.

KW Biosynthetic multifunctional protein; biosynthetic antibody binding site;

KW protein trailer; platelet derived growth factor-beta.

PN W08809344-A.

PD 01-DEC-1988.

PF 19-MAY-1988; U01737.

PR 21-MAY-1987; US-052800.

PA (CREA-) Creative Biomolecules Inc.

PI Huston JS, Oppermann H;

DR WPI; 88-353928/49.

DR N-PSDB; N80189.

PT Recombinant multifunctional protein - having antibody binding site and a

PT sequence for biological activity, ion sequestering or binding to a

PT solid support.

PS Disclosure; 115pp; English.

CC The sequence is a biosynthetic multifunctional protein including a

CC biosynthetic antibody binding site and a platelet derived growth

CC factor-beta protein trailer linked via a spacer sequence.

SQ Sequence 114 AA;

Query Match 5.9%; Score 6; DB 1; Length 114;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 19 AECTR 24

QY 71 AECTR 76

RESULT 24

ID R04020 standard; peptide; 114 AA.

AC R04020;

DT 18-MAR-1993 (first entry)

DE PDGF-BB monomer unit.

KW Platelet derived growth factor; fibroblast; smooth muscle cell;

KW monomer.

OS Synthetic.

PN DE3834079-A.

PD 12-APR-1990.

PF 06-OCT-1988; 834079.

PR 06-OCT-1988; DE-834079.

PA (GHFB) GHF GES BIOTECH FORSCH.

PI Hoppe J, Eichner W, Weich H;

DR WPI; 90-116760/16.

PT New homo-dimeric form of platelet derived growth factor -

PT stimulates growth of fibroblasts and smooth muscle cells

PS Claim 1; Page 5; 9pp; German.

CC A biologically active PDGF-BB contains monomer units having the sequence below. Both monomeric units can have (independent of the other) amino acid deletions or substitutions or include extra amino acids. Esp. the C-termini of both monomeric units may have deletions or extensions of up to 14 amino acids.

CC PDGF-BB actively stimulates growth of fibroblast and smooth muscle

CC cells and can be used therapeutically.

SQ Sequence 114 AA;

Query Match 5.9%; Score 6; DB 1; Length 114;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECTR 19

QY 71 AECTR 76

RESULT 25

ID R26047 standard; Protein; 114 AA.

AC R26047;

DT 27-JAN-1993 (first entry)

DE PDGF-B7.

KW Dimer; analogue; PDGF-Bt; PDGF-A.

OS Synthetic.

FH Key Location/Qualifiers

FT misc_difference 32

FT /label= R32P

PN W09213073-A.

PD 06-AUG-1992.

PF 24-JAN-1992; G00141.

PR 25-JAN-1991; GB-001645.

PA (BRBI-) BRITISH BIO-TECHNOLOGY LTD.

PA (PFIZ) PFIZER LTD.

PI Brown D, Clements JM, Cook AL, Craig S, Edwards RM;

DR WPI; 92-284658/34.

DR N-PSDB; Q27208.

PT Protease-resistant platelet-derived growth factor-B analogues -

PT for treating atherosclerosis and wounds, having aminoacid(s)

PT replaced by residue which reduces or prevents cleavage after

PT specific aminoacid

PS Claim 7; Page 58; 71pp; English.

CC The Arg at coding position 32 has been altered to Pro, which is the

CC same residue which is found in PDGF-A. This PDGF-B analogue can be

CC used in the production of a dimer. This dimer can be useful in

CC veterinary or human medicine for preparing a medicament for promoting

CC wound healing and/or treating atherosclerosis. The analogue, when

CC dimerised has a biological activity equivalent to a naturally-occurring


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CC PDGF-B dimer.
SQ Sequence 114 AA;

Query Match 5.9%; Score 6; DB 1; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 19 AECKTR 24
   |||||
QY 71 AECKTR 76

RESULT 26
ID R41523 standard; Protein; 120 AA.
AC R41523;
DT 04-MAR-1994 (first entry)
DE PDGF refolded B119 homodimer.
KW Platelet derived-growth factor; recombinantly-derived;
KW refolded B-chain; enhance; enhancement; proliferation; activation;
KW epithelial cells; keratinocytes; cornea; accelerate; wound healing;
KW re-innervation; corneal epithelium; laser surgery; diabetes.
PN Homo sapiens.
PN WQ9316719-A.
PD 02-SEP-1993.
PF 24-FEB-1993; U01731.
PR 26-FEB-1992; US-842306.
PA (ALLR ) ALLERGAN INC.
PI Nicolson MA, Stern ME, Wheeler LA;
DR WPI; 93-288121/36.
DR N-PSDB; Q48409.
PT Accelerating corneal wound healing - using platelet-derived growth
PT factor to improve quality of healing and accelerate re-innervation
PS Example 1; Fig 14; 60pp; English.
CC The sequence is that of a recombinantly-derived platelet-derived
CC growth factor refolded B-chain homodimer of 119 amino acids.
CC It may be used to enhance proliferation and activation of
CC epithelial cells and/or keratocytes of the cornea to accelerate
CC wound healing, improve the quality of wound healing (by decreasing
CC epithelial sloughing and/or decreasing scar formation) and
CC accelerate re-innervation of the corneal epithelium. The wounds may
CC be as a result of laser surgery or diabetes.
SQ Sequence 120 AA;

Query Match 5.9%; Score 6; DB 1; Length 120;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 15 AECKTR 20
   |||||
QY 71 AECKTR 76

RESULT 27
ID R67261 standard; Protein; 120 AA.
AC R67261;
DT 23-JUN-1995 (first entry)
DE PDGF-B119.
KW PDGF-B119; platelet-derived growth factor; tissue growth factor;
KW collateral circulation; anastomosis; ischemia.
OS Homo sapiens.
PN W09425056-A.
PD 10-NOV-1994.
PF 29-APR-1994; U04762.
PR 29-APR-1993; US-055062.
PA (UNIW ) UNIV WASHINGTON.
PI Khouri RK;
DR WPI; 95-006213/01.
DR N-PSDB; Q75291.
PT Use of platelet-derived growth factor to improve collateral
PT circulation - administered to tissues at risk of ischemia
PS Disclosure; Fig. 1; 59pp; English.
CC PDGF-B119 corresponds to the first 119 amino acids of the c-sis
CC encoded PDGF-B precursor protein. Encoding DNA, obtained from

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CC c-sis or by modification of v-sis can be used to prepare
CC recombinant PDGF-B119 homodimer in Escherichia coli.
SQ Sequence 120 AA;

Query Match 5.9%; Score 6; DB 1; Length 120;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 15 AECKTR 20
   |||||
QY 71 AECKTR 76

RESULT 28
ID R12879 standard; Protein; 120 AA.
AC R12879;
DT 18-SEP-1991 (first entry)
DE rPDGF-B119 from pCFM1156.
KW Recombinant platelet-derived growth factor; B chain; PDGF-B109;
KW v-sis-gene; SSV.
OS Simian sarcoma virus.
PN WQ9108761-A.
PD 27-JUN-1991.
PF 17-DEC-1990; U07451.
PR 19-DEC-1989; US-454794.
PR 13-DEC-1990; US-624451.
PA (AMGE-) AMGEN INC.
PI Thomason AR;
DR WPI; 91-207869/28.
DR N-PSDB; Q12487.
PT Platelet-derived growth factor B chain analogues - used to treat
PT wounds, to aid in healing of bone, cartilage, tendons, ligaments
PT and epithelium
PS Disclosure; Fig 33(a-b); 59pp; English.
CC The v-sis-gene (the oncogene present in SSV), encoding a protein
CC more than 90% homologous with the PDGF-B chain, is subjected to
CC in vitro mutagenesis to change codons 101 and 107, then cut back
CC (to amino acid 24) with BglII. The portion removed is replaced by
CC a synthetic sequence corresp. to c-sis PP (i.e. providing
CC conversion of amino acids 6-7 to the form present in PDGF). A similar
CC cut-back is used at the c-terminus to change amino acids 114 and to
CC introduce a stop codon at amino acid position 120.
CC The final construct is then incorporated into an expression vector
CC and the recombinant prod. esp. used to transform E. coli.
CC The recombinant prod. is isolated, refolded and purified.
CC See also W09108762.
SQ Sequence 120 AA;

Query Match 5.9%; Score 6; DB 1; Length 120;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 15 AECKTR 20
   |||||
QY 71 AECKTR 76

RESULT 29
ID R60614 standard; Protein; 120 AA.
AC R60614;
DT 19-MAY-1995 (first entry)
DE Human PDGF-B 119 subunit.
KW Human platelet derived growth factor; PDGF-B subunit; v-sis gene;
KW PDGF-BB fusion protein; wound healing.
OS Homo sapiens.
PN EP-618227-A.
PD 05-OCT-1994.
PF 31-MAR-1994; 105075.
PR 01-APR-1993; US-041635.
PA (AMGE-) AMGEN INC.
PI Thomason AR;
DR WPI; 94-304405/38.
DR N-PSDB; Q71557.

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PT New multimeric polypeptide comprising fused subunits of natural
 PT protein. - and related DNA and transformed cells, esp. dimers of
 PT platelet derived growth factor, useful for stimulating healing of
 PT wounds.
 PS Example 1; Page 16; 30pp; English.
 CC The PDGF-B 119 subunit coding sequence was obtained by mutagenesis
 CC of the human v-sis sequence; Ile 101 and Ala 107 codons were
 CC replaced by Thr and Pro codons, respectively. Then the 5'-end was
 CC replaced by a synthetic fragment which changed amino acids 6 and 7
 CC to the corresp. amino acids found in the human form. Finally Thr
 CC 114 was replaced by Gly and a stop codon was introduced at position
 CC 120. The subunit was incorporated into a single polypeptide with a
 CC PDGF-B 109 subunit, pref. separated by a peptide linker to produce
 CC preferred fusion polypeptide of the invention. The fusion
 CC polypeptide is useful for treating wounds.
 SQ Sequence 120 AA;

Query Match 5.9%; Score 6; DB 1; Length 120;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

15 AECKTR 20
 |||||
 QY 71 AECKTR 76

RESULT 30
 ID R12881 standard; Protein; 129 AA.
 AC R12881;
 DT 24-SEP-1991 (first entry)
 DE rPDGF-B109 [Ser43, Ser52, Ser53, Ser99].
 KW Platelet derived growth factor; disulphide bond; inclusion bodies;
 CC PDGF B.
 OS Synthetic.
 PN W09108762-A.
 PD 27-JUN-1991. U07460.
 PF 17-DEC-1990; U07460.
 PR 15-DEC-1989; US-451485.
 PR 12-DEC-1990; US-623671.
 PA (AMGE-) AMGEN INC.
 PI LYONS DE, Thomason AR;
 WPI: 91-207870/28.
 DR N-PSDB; Q12489.

PT Refolding reduced platelet derived growth factor - by conversion
 PT to mixed di-sulphide with blocking agent, converting to active
 PT form and de-blocking esp. for inclusion bodies in E coli
 PS Disclosure: Fig 10(A-B); 79pp; English.
 CC The starting material was the v-sis gene, with the four amino acid
 CC differences between the v-sis protein and human PDGF B (i.e.
 CC residues 6, 7, 100 and 107) being changed to the human form of PDGF B.
 CC These changes involved mutagenesis of amino acids 100 and 107, and
 CC replacement of the 5' end of the gene with a synthetic DNA fragment
 CC changing amino acids 6 and 7. The synthetic DNA fragment also
 CC provided a translation initiating ATG codon preceding the Ser1 codon, as
 CC well as an upstream XbaI site for ligation into the desired E. coli
 CC expression vector. The resulting DNA was used as a template for further
 CC mutagenesis reactions to introduce four cysteine to serine changes and
 CC a stop codon at position 110. The four Cys residues which were
 CC changed are those residues at positions 43, 52, 53 and 99.
 CC The prod. was refolded into a biologically active monomer without
 CC interference from incorrect disulphide bond formation.
 CC See also W09108761.
 SQ Sequence 129 AA;

Query Match 5.9%; Score 6; DB 1; Length 129;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

15 AECKTR 20
 |||||
 QY 71 AECKTR 76

RESULT 31
 ID W64063 standard; Protein; 146 AA.
 AC W64063;
 DT 06-OCT-1998 (first entry)
 DE Chimeric rPDGF-B expression cassette protein.
 KW Platelet derived growth factor; PDGF-B; fusion protein; secretion;
 OS expression; yeast; human.
 OS Homo sapiens.
 OS Saccharomyces cerevisiae.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT Peptide 1..37
 FT /note= "truncated yeast alpha factor leader"
 FT Protein 38..146
 FT /label= rPDGF-B
 FT /note= "human platelet derived growth factor B"
 PN W09826080-A1.
 PD 18-JUN-1998.
 PF 12-DEC-1997; U22647.
 PR 13-DEC-1996; US-032720.
 PA (CHIR) CHIRON CORP.
 PI Merryweather JP, Tekamp-Olson P;
 WPI: 98-348534/30.
 DR N-PSDB; V44136.
 DR Nucleotide sequence for expression of heterologous proteins in yeast
 PT - useful to produce heterologous mammalian proteins in biologically
 PT active, mature form, e.g. human platelet-derived growth factor
 PS Example 2; Page 49-50; 81pp; English.
 CC This sequence represents a novel fusion protein cassette constructed from
 CC the Saccharomyces cerevisiae alpha leader peptide and human platelet
 CC derived growth factor type B (PDGF-B). This protein is used in a method
 CC which allows the expression of heterologous mammalian proteins and their
 CC secretion in the biologically active, mature form, by transforming yeast
 CC host cells with the vector and expressing the proteins. It is
 CC particularly useful to produce mammalian proteins whose assumption of a
 CC native conformation is facilitated by the presence of a native
 CC propeptide sequence in the precursor polypeptide. Expression and
 CC secretion of proteins in biologically active, mature form is possible,
 CC whilst previous methods have often encountered problems of
 CC post-translational processing leading to, e.g. production of inactive
 CC forms or insufficient amounts of protein.
 SQ Sequence 146 AA;

Query Match 5.9%; Score 6; DB 1; Length 146;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 51 AECKTR 56
 |||||
 QY 71 AECKTR 76

RESULT 32
 ID W64062 standard; Protein; 146 AA.
 AC W64062;
 DT 06-OCT-1998 (first entry)
 DE Chimeric rPDGF-B protein.
 KW Platelet derived growth factor; PDGF-B; fusion protein; secretion;
 OS expression; yeast; human.
 OS Homo sapiens.
 OS Saccharomyces cerevisiae.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT Peptide 1..37
 FT /label= leader
 FT /note= "yeast alpha factor leader peptide"
 FT Protein 38..146
 FT /label= PDGF-B
 FT /note= "human platelet derived growth factor type B"
 PN W09826080-A1.
 PD 18-JUN-1998.
 PF 12-DEC-1997; U22647.
 PR 13-DEC-1996; US-032720.

PA (CHIR) CHIRON CORP.
 PI Merryweather JP, Tekamp-Olson P;
 DR WPI: 98-348534/30.
 DR N-PSDB; V41114.
 DR Nucleotide sequence for expression of heterologous proteins in yeast
 PT - useful to produce heterologous mammalian proteins in biologically
 PT active, mature form, e.g. human platelet-derived growth factor
 PS Example 1; Page 38; 81pp; English.
 CC This sequence represents a novel fusion protein constructed from the
 CC Saccharomyces cerevisiae alpha leader peptide and human platelet
 CC derived growth factor type B (PDGF-B). This protein is used in a method
 CC which allows the expression of heterologous mammalian proteins and their
 CC secretion in the biologically active, mature form, by transforming yeast
 CC host cells with the vector and expressing the proteins. It is
 CC particularly useful to produce mammalian proteins whose assumption of a
 CC native conformation is facilitated by the presence of a native
 CC propeptide sequence in the precursor polypeptide. Expression and
 CC secretion of proteins in biologically active, mature form is possible,
 CC whilst previous methods have often encountered problems of
 CC post-translational processing leading to, e.g. production of inactive
 CC forms or insufficient amounts of protein.
 SQ Sequence 146 AA;

Query Match 5.9%; Score 6; DB 1; Length 146;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 51 AECKTR 56
 |||||
 QY 71 AECKTR 76

RESULT 33

ID R26045 standard; Protein; 161 AA.
 AC R26045;
 DT 27-JAN-1993 (first entry)
 DE Synthetic PDGF-B.
 KW S. cerevisiae; E. coli; dimer; analogue.
 OS Synthetic.
 PN W09213073-A.
 PD 06-AUG-1992.
 PF 24-JAN-1992; G00141.
 PR 25-JAN-1991; GB-001645.
 PA (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
 PI (PFIZ) PFIZER LTD.
 PI Brown D, Clements JM, Cook AL, Craig S, Edwards RM;
 DR WPI: 92-284658/34.
 DR N-PSDB; Q27204.
 CC Protease-resistant platelet-derived growth factor-B analogues -
 CC for treating atherosclerosis and wounds, having aminoacid(s)
 CC replaced by residue which reduces or prevents cleavage after
 CC specific aminoacid
 PT Disclosure: Fig 3; 71pp; English.
 PS The gene encoding this sequence is a synthetic gene which was designed
 CC with codons selected which are favoured by either S. cerevisiae or E.
 CC coli and is thus suitable for expression in either organism. This
 CC platelet-derived growth factor (PDGF) analogue can be used in the
 CC production of a dimer. This dimer can be useful in veterinary or
 CC human medicine for preparing a medicament for promoting wound healing
 CC and/or treating atherosclerosis. The analogue, when dimerised has a
 CC biological activity equivalent to a naturally-occurring PDGF-B dimer.
 SQ Sequence 161 AA;

Query Match 5.9%; Score 6; DB 1; Length 161;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 15 AECKTR 20
 |||||
 QY 71 AECKTR 76

RESULT 34

ID R87507 standard; Protein; 175 AA.
 AC R87507;
 DT 15-OCT-1995 (first entry)
 DE Caenorhabditis elegans her-1 protein.
 KW Nematode; her-1; hermaphroditization; biological control agent;
 KW male differentiation.
 OS Caenorhabditis elegans.
 FH Key Location/Qualifiers
 FT protein 1..175
 FT /label= her-1 protein
 PN US5472871-A.
 PD 05-DEC-1995.
 PF 28-FEB-1992; 844294.
 PR 28-FEB-1992; US-844294.
 PR 09-FEB-1994; US-194180.
 PA (COLS) UNIV COLORADO FOUND INC.
 PI Perry MD, Trent C, Wood WB;
 DR WPI: 96-029813/03.
 DR N-PSDB; T06745, T06746.
 DR Nematode her-1 gene - encodes a protein which induces male
 PT differentiation, used for controlling nematodes
 PS Claim 1; Fig.3; 29pp; English.
 CC This her-1 protein from C. elegans prevents female development in
 CC nematodes and activates the male development pathway. It can be
 CC used for genetically engineering plants, bacteria and endophytes
 CC to control nematode infestation in plants. The her-1 protein can
 CC be used for the control of nematode infestation in plants, animals
 CC and humans. This protein may be expressed recombinantly in E. coli
 CC using an expression vector.
 SQ Sequence 175 AA;

Query Match 5.9%; Score 6; DB 1; Length 175;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 81 KINLDD 86
 |||||
 QY 84 KINLDD 89

RESULT 35

ID R50012 standard; Protein; 190 AA.
 AC R50012;
 DT 29-SEP-1994 (first entry)
 DE Truncated platelet derived growth factor PDGF-B190 mutant.
 KW Platelet-Derived Growth Factor; heterodimer; PDGF-AB;
 KW recombinant protein production; truncated PDGF-B chain; secretatable;
 KW bicistronic vector system; PCR; mutagenesis.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT peptide 1..81
 FT /label= pre-peptide
 FT 82..190
 FT /label= mature_PDFG-B
 PN W09405785-A.
 PD 17-MAR-1994.
 PF 26-AUG-1993; E02294.
 PR 27-AUG-1992; DE-228458.
 PA (BEIE) BEIERSDORF AG.
 PA (GBFB) GBF GES BIOTECH FORSCHUNG GMBH.
 PI Achterberg V, Dirks W, Dorschner A, Eichner W, Hauser H;
 PI Meyer-Ingold W, Mielke H, Wirth M, Doerschner A;
 DR WPI: 94-101190/12.
 DR N-PSDB; O58733.
 DR New multicistronic expression units - for producing equimolar
 PT ams. of polypeptide(s) in mammalian cells as hosts
 PS Claim 12; Page 68-69; 109pp; German.
 CC In order to increase the amount of recombinantly produced PDGF-B
 CC that is secreted from a host, a truncated version of the protein
 CC is produced. A stop codon is introduced at amino acid position 191
 CC with the result that the mature protein is still produced but the
 CC additional C-terminal sequence responsible for retaining PDGF-B at
 CC the cell surface is removed. The coding sequence is preferred for

CC use in a bicistronic expression system for the recombinant
 CC production of a PDGF-AB heterodimer.
 SQ Sequence 190 AA;

Query Match 5.9%; Score 6; DB 1; Length 190;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 |||||
 QY 71 AECKTR 76

RESULT 36
 ID R0615 standard; Protein; 190 AA.
 AC R0615;
 DT 19-MAY-1995 (first entry)
 DE Human PDGF-B 109 subunit precursor.
 KW Human platelet derived growth factor; PDGF-B subunit; v-sis gene;
 KW PDGF-BB fusion protein; wound healing.
 CC Homo sapiens.
 FH Key Location/Qualifiers
 FT protein 82..190
 FT /label= PDGF-B109
 FT region 1..81
 FT /label= pre-pro-region
 PN EP-618227-A.
 PD 05-OCT-1994.
 PF 31-MAR-1994; 105075.
 PR 01-APR-1993; US-041635.
 PA (AMGE-) AMGEN INC.
 PI Thomason AR;
 DR WPI; 94-304405/38.
 DR N-PSDB; Q71558.
 PT New multimeric polypeptide comprising fused subunits of natural
 PT protein. - and related DNA and transformed cells, esp. dimers of
 PT platelet derived growth factor, useful for stimulating healing of
 PT wounds.
 PS Example 2; Page 17-18; 30pp; English.
 CC The PDGF-B 109 subunit coding sequence was obtained as composite
 CC sequence of fragments from human PDGF-B pre-pro region, human v-sis
 CC gene and synthetic fragments. The mature 109 amino acid subunit was
 CC incorporated into a single polypeptide with a PDGF-B 119 subunit,
 CC pref. separated by a peptide linker to produce a preferred fusion
 CC polypeptide of the invention. The fusion polypeptide is useful for
 CC treating wounds.
 SQ Sequence 190 AA;

Query Match 5.9%; Score 6; DB 1; Length 190;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 |||||
 QY 71 AECKTR 76

RESULT 37
 ID R05615 standard; protein; 198 AA.
 AC R05615;
 DT 13-AUG-1990 (first entry)
 DE BIV vtf gene product.
 KW BIV 127; BIV 106; vaccine; AIDS; ds.
 OS Bovine Immunodeficiency Virus.
 PN US7408815-A.
 PD 30-JAN-1990.
 PF 18-SEP-1989; 408815.
 PR 18-SEP-1989; US-408815.
 PA (USSH) US Dept of Health & Human.
 PI Gonda M;
 DR WPI; 90-099193/13.
 DR N-PSDB; Q05056 and Q03642.
 PT Cloned bovine immuno-deficiency like virus -

PT used for preparing vaccines or making antigens, antibodies or
 PT DNA probes for diagnostic tests.
 PS Disclosure; Fig 6; 65pp; English.
 CC The sequence is useful in manufacturing antigens, and antibodies
 CC for diagnosis, treatment and prophylaxis of the BIV induced disease.
 SQ Sequence 198 AA;

Query Match 5.9%; Score 6; DB 1; Length 198;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 141 SVLTST 146
 |||||
 QY 16 SVLTST 21

RESULT 38
 ID W53971 standard; peptide; 202 AA.
 AC W53971;
 DT 19-AUG-1998 (first entry)
 DE Crinipellis scabella wild-type cellulase.
 KW Cellulase; variant; cellulolytic enzyme; endoglucanase V; EGV; paper;
 KW protein engineering; detergent; fabric softener; pulp; debarking;
 KW defibrination; fibre modification; degradation.
 OS Crinipellis scabella.
 PN W09812307-A1.
 PD 26-MAR-1998.
 PF 17-SEP-1997; DK0393.
 PR 17-SEP-1996; DK-001013.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen KV, Christiansen L, Damgaard B, Schulein M;
 DR WPI; 98-217251/19.
 PT Cellulase enzyme variants - having amino acid changes which improve
 PT properties e.g. activity, sensitivity to surfactants, pH optimum or
 PT stability
 PS disclosure; page 7-11; 115pp; English.
 CC The present invention describes a cellulase enzyme variant comprising a
 CC catalytic core domain exhibiting cellulolytic activity which is derived
 CC from a naturally occurring parental cellulase by amino acid residue
 CC substitution, insertion and/or deletion; and (with cellulase numbering):
 CC (a) at position 5 has an Ala, Ser, or Thr residue; (b) at position 8 has
 CC a Phe or a Tyr residue; (c) at position 9 has a Phe, Trp, or Tyr residue;
 CC (d) at position 10 has a Asp residue; (e) at position 121 has a Asp
 CC residue. The present sequence represents the Crinipellis scabella wild-
 CC type cellulase used as a basis for the new cellulase enzyme variants. The
 CC new cellulase enzymes can be used in e.g. detergent or fabric softener
 CC compositions, for bio-polishing of new fabrics, for promoting a stone-
 CC washed look to cellulosic containing fabric, for pulp and paper
 CC applications, e.g. for debarking, defibration, fibre modification,
 CC drainage improvement, inter fibre bonding or for degradation of plant
 CC material e.g. for improving feed value. The cellulase variants have
 CC improved properties with respect to e.g. catalytic activity, altered
 CC sensitivity to anionic tensides, pH optimum or activity profile or
 CC stability.
 SQ Sequence 202 AA;

Query Match 5.9%; Score 6; DB 1; Length 202;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 76 LAGSSE 81
 |||||
 QY 63 LAGSSE 68

RESULT 39
 ID W53970 standard; peptide; 204 AA.
 AC W53970;
 DT 19-AUG-1998 (first entry)
 DE Mycelophthora thermophila wild-type cellulase.
 KW Cellulase; variant; cellulolytic enzyme; endoglucanase V; EGV; paper;
 KW protein engineering; detergent; fabric softener; pulp; debarking;
 KW defibrination; fibre modification; degradation.

OS Myceliophthora thermophila.
 PN W09812307-A1.
 PD 26-MAR-1998.
 PF 17-SEP-1997; DK0393.
 PR 17-SEP-1996; DK-001013.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen KV, Christiansen L, Dangaard B, Schulein M;
 DR WPI; 98-217251/19.
 PT Cellulase enzyme variants - having amino acid changes which improve
 PT properties e.g. activity, sensitivity to surfactants, pH optimum or
 PT stability
 PS Disclosure; Page 7-11; 115pp; English.
 CC The present invention describes a cellulase enzyme variant comprising a
 CC catalytic core domain exhibiting cellulolytic activity which is derived
 CC from a naturally occurring parental cellulase by amino acid residue
 CC substitution, insertion and/or deletion; and (with cellulase numbering):
 CC (a) at position 5 has an Ala, Ser, or Thr residue; (b) at position 8 has
 CC a Phe or a Tyr residue; (c) at position 9 has a Phe, Trp, or Tyr residue;
 CC (d) at position 10 has a Asp residue; (e) at position 121 has a Asp
 CC residue. The present sequence represents the Myceliophthora thermophila
 CC wild-type cellulase used as a basis for the new cellulase enzyme
 CC variants. The new cellulase enzymes can be used in e.g. detergent or
 CC fabric softener compositions, for bio-polishing of new fabrics, for
 CC promoting a stone-washed look to cellulosic containing fabric, for pulp
 CC and paper applications, e.g. for debarking, defibration, fibre
 CC modification, drainage improvement, inter fibre bonding or for
 CC degradation of plant material e.g. for improving feed value. The
 CC cellulase variants have improved properties with respect to e.g.
 CC catalytic activity, altered sensitivity to anionic tensides, pH optimum
 CC or activity profile or stability.
 SQ Sequence 204 AA;

Query Match 5.9%; Score 6; DB 1; Length 204;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 77 LAGSSE 82
 QY 63 LAGSSE 68

RESULT 40
 ID W64064 standard; Protein; 205 AA.
 AC W64064;
 DT 06-OCT-1998 (first entry)
 DE Chimeric rPDGF-B protein with human pro-sequence.
 KW Platelet derived growth factor; PDGF-B; fusion protein; secretion;
 KW expression; yeast; human.
 CC Homo sapiens.
 OS Saccharomyces cerevisiae.
 FH Synthetic.
 FT Key Location/Qualifiers
 FT Peptide 1..37
 FT /label= signal
 FT /note= "yeast truncated alpha factor leader peptide"
 FT Peptide 38..96
 FT /label= propeptide
 FT /note= "human PDGF propeptide"
 FT Protein 97..205
 FT /label= rHPDGF-B
 FT /note= "human platelet derived growth factor B"
 FT W09826080-A1.
 PN 18-JUN-1998.
 PD 12-DEC-1997; U22647.
 PR 13-DEC-1996; US-032720.
 PA (CHIR) CHIRON CORP.
 PI Merryweather JP, Tekamp-Olson P;
 DR WPI; 98-348534/30.
 DR N-PSDB; V44137.
 PT Nucleotide sequence for expression of heterologous proteins in yeast
 PT - useful to produce heterologous mammalian proteins in biologically
 PT active, mature form, e.g. human platelet-derived growth factor
 PS Example 3; Page 61-62; 81pp; English.
 CC This sequence represents a novel fusion protein constructed from the
 CC Saccharomyces cerevisiae alpha leader peptide and human platelet derived
 CC growth factor type B (PDGF-B) and also contains a human propeptide
 CC sequence and an ADH/GAP promoter. This protein is used in a method which
 CC allows the expression of heterologous mammalian proteins and their
 CC secretion in the biologically active, mature form, by transforming yeast
 CC host cells with the vector and expressing the proteins. It is
 CC particularly useful to produce mammalian proteins whose assumption of a
 CC native conformation is facilitated by the presence of a native propeptide
 CC sequence in the precursor polypeptide. Expression and secretion of
 CC proteins in biologically active, mature form is possible, whilst previous
 CC methods have often encountered problems of post-translational processing
 CC leading to, e.g. production of inactive forms or insufficient amounts of
 CC protein.
 SQ Sequence 205 AA;

Query Match 5.9%; Score 6; DB 1; Length 205;

CC This sequence represents a novel fusion protein constructed from the
 CC Saccharomyces cerevisiae alpha leader peptide and human platelet derived
 CC growth factor type B (PDGF-B) and also contains a human propeptide
 CC sequence. This protein is used in a method which allows the expression of
 CC heterologous mammalian proteins and their secretion in the biologically
 CC active, mature form, by transforming yeast host cells with the vector and
 CC expressing the proteins. It is particularly useful to produce mammalian
 CC proteins whose assumption of a native conformation is facilitated by the
 CC presence of a native propeptide sequence in the precursor polypeptide.
 CC Expression and secretion of proteins in biologically active, mature form
 CC is possible, whilst previous methods have often encountered problems of
 CC post-translational processing leading to, e.g. production of inactive
 CC forms or insufficient amounts of protein.
 SQ Sequence 205 AA;

Query Match 5.9%; Score 6; DB 1; Length 205;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 110 AECKTR 115
 QY 71 AECKTR 76

RESULT 41
 ID W64066 standard; Protein; 205 AA.
 AC W64066;
 DT 06-OCT-1998 (first entry)
 DE Chimeric rPDGF-B protein with human pro-sequence and ADH/GAP promoter.
 KW Platelet derived growth factor; PDGF-B; fusion protein; secretion;
 KW expression; yeast; human.
 CC Homo sapiens.
 OS Saccharomyces cerevisiae.
 FH Synthetic.
 FT Key Location/Qualifiers
 FT Peptide 1..37
 FT /label= signal
 FT /note= "yeast truncated alpha factor leader peptide"
 FT Peptide 38..96
 FT /label= propeptide
 FT /note= "human PDGF propeptide"
 FT Protein 97..205
 FT /label= rHPDGF-B
 FT /note= "human platelet derived growth factor B"
 FT W09826080-A1.
 PN 18-JUN-1998.
 PD 12-DEC-1997; U22647.
 PR 13-DEC-1996; US-032720.
 PA (CHIR) CHIRON CORP.
 PI Merryweather JP, Tekamp-Olson P;
 DR WPI; 98-348534/30.
 DR N-PSDB; V44137.
 PT Nucleotide sequence for expression of heterologous proteins in yeast
 PT - useful to produce heterologous mammalian proteins in biologically
 PT active, mature form, e.g. human platelet-derived growth factor
 PS Example 3; Page 61-62; 81pp; English.
 CC This sequence represents a novel fusion protein constructed from the
 CC Saccharomyces cerevisiae alpha leader peptide and human platelet derived
 CC growth factor type B (PDGF-B) and also contains a human propeptide
 CC sequence and an ADH/GAP promoter. This protein is used in a method which
 CC allows the expression of heterologous mammalian proteins and their
 CC secretion in the biologically active, mature form, by transforming yeast
 CC host cells with the vector and expressing the proteins. It is
 CC particularly useful to produce mammalian proteins whose assumption of a
 CC native conformation is facilitated by the presence of a native propeptide
 CC sequence in the precursor polypeptide. Expression and secretion of
 CC proteins in biologically active, mature form is possible, whilst previous
 CC methods have often encountered problems of post-translational processing
 CC leading to, e.g. production of inactive forms or insufficient amounts of
 CC protein.
 SQ Sequence 205 AA;

Query Match 5.9%; Score 6; DB 1; Length 205;

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Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 110 AECKTR 115
   |||||
QY 71 AECKTR 76

RESULT 42
ID R68617 standard; Protein; 216 AA.
AC R68617;
DT 31-AUG-1995 (first entry)
DE Human PDGF-B precursor sequence (N-terminally truncated).
KW Platelet-derived growth factor beta; PDGF-B; precursor; multimer;
OS multicistronic expression unit; recombinant protein production.
FH Homo sapiens.
FT Key Location/Qualifiers
FT region 1..56
FT /label= pre-region
FT /note= "truncated"
FT /label= mature_PDGF-B
protein
DB4319708-A.
PD 15-DEC-1994.
PF 10-JUN-1993; 319708.
PR 10-JUN-1993; DE-319708.
PA (BEIE ) BEIERSDORF AG.
PA (GBFB ) GBF GES BIOTECH FORSCHUNG GMBH.
PI Eichner W, McCarthy JBG, Schneppe B;
DR WPI: 95-023815/04.
DR N-PSDB; Q80473.
PT Recombinant multimeric protein prodn. in bacteria - transfected
PT with vector contg. new multi-cistronic expression unit, providing
PT high level prodn. of pharmaceutical and cosmetic products
PS Example 2.1.2: Page 23-24; 42pp; German.
CC Plasmid pMWV-2 contains the cDNA of the human PDGF-B gene, but with
CC the 5'-translated region of the precursor being incomplete (see
CC Q80473, which encodes R68617). The BamHI/NcoI fragment of pMWV-2 was
CC used as the basis for mutagenesis to isolate the sequence coding for
CC mature PDGF-B with a Met residue at the N-terminus. The mutagenised
CC coding sequence was used in the construction of multicistronic
CC expression units for recombinant expression of the PDGF-A/B dimer
CC in bacteria.
SQ Sequence 216 AA;

Query Match 5.9%; Score 6; DB 1; Length 216;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 70 AECKTR 75
   |||||
QY 71 AECKTR 76

RESULT 43
ID R63470 standard; Protein; 220 AA.
AC R63470;
DT 28-JUN-1995 (first entry)
DE Recombinant platelet derived growth factor B exons 2-6.
KW Recombinant platelet derived growth factor B; rPDGF B; exons 2-6;
KW wound healing; antibody production.
OS Synthetic.
PN EP-622456-A.
PD 02-NOV-1994.
PF 10-MAR-1988; 302116.
PR 13-MAR-1987; US-025344.
PR 19-FEB-1988; US-152045.
PA (AMGE-) AMGEN INC.
PI Nicolson MA, Thomason AR;
DR WPI: 94-334642/42.
DR N-PSDB; Q78189.
PT New vectors expressing platelet-derived growth factor B
PT epitope(s) - and contg. c-sis or v-sis genes portions; are used

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PT to promote wound healing and produce antibodies
PS Example 1; Fig 4; 49pp; English.
CC Q78189 exons 2-6 of recombinant platelet derived growth factor B
CC (-PDGF B) encodes R63470. rPDGF B may be used to promote wound healing,
CC or as an antigen to prepare antisera or monoclonal antibodies specific
CC for epitopes on the B chain of PDGF.
SQ Sequence 220 AA;

Query Match 5.9%; Score 6; DB 1; Length 220;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 74 AECKTR 79
   |||||
QY 71 AECKTR 76

RESULT 44
ID R40965 standard; Protein; 220 AA.
AC R40965;
DT 25-FEB-1994 (first entry)
DE rPDGF B.
KW Monoclonal antibody; specific; epitope: B-Chain; PDGF;
KW platelet-derived growth factor; wound healing; binding.
OS Homo sapiens.
PN EP-559234-A.
PD 08-SEP-1993.
PF 10-MAR-1988; 302116.
PR 13-MAR-1987; US-025344.
PR 19-FEB-1988; US-152045.
PA (AMGE-) AMGEN.
PI Nicolson MA, Thomason AR;
DR WPI: 93-282094/36.
DR N-PSDB; Q48656.
PT New monoclonal antibody for prepn. of poly-peptide for wound
PT healing - is specific for epitope in B-chain of platelet-derived
PT growth factor
PS Example 1; Fig 4; 39pp; English.
CC Example 1 describes the subcloning and analysis of C-sis and V-sis
CC genes encoding rPDGF B chain.
CC Clone U2-OS561 contains the c-sis gene encoding human PDGF B chain.
CC Exons 2-6 of this clone were subcloned and sequenced. They encode
CC the mature rPDGF B protein. The exon sequences are the same as those
CC published for a c-cis gene isolated from a human fetal liver chromosomal
CC library. (Josephs et al, Science 223: 487 (1984))
SQ Sequence 220 AA;

Query Match 5.9%; Score 6; DB 1; Length 220;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 74 AECKTR 79
   |||||
QY 71 AECKTR 76

RESULT 45
ID W04925 standard; Protein; 225 AA.
AC W04925;
DT 20-MAY-1997 (first entry)
DE Cellulytic enzyme #1 of the invention.
DE Cellulytic enzyme; endoglycanase; hydrolysis; cellulose; microorganism;
KW plant cellulase; catalytic region; textile; backstaining; bio-polishing;
KW stone-washing; cellulosic fabric; colour clarification; defibration;
KW cell wall degradation; paper pulp; debarking; fibre modification;
KW enzymatic de-inking; drainage improvement.
OS Myceliophthora thermophila.
PN W09629397-A1.
PD 26-SEP-1996.
PF 18-MAR-1996; DK0105.
PR 17-MAR-1995; DK-000272.
PR 08-AUG-1995; DK-000887.
PR 08-AUG-1995; DK-000885.

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PR 08-AUG-1995; DK-000888.
 PR 08-AUG-1995; DK-000886.
 PR 12-FEB-1996; DK-000137.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen LN, Ihara M, Kauppinen MS, Lange L, Lassen SF;
 DR WPI; 96-443173/44.
 DR N-PSDB; T39047.
 PT New endo:glucanase enzyme preparations - contg. conserved catalytic
 PT regions, useful for treating fabrics, textiles, plant material or
 PT paper pulp
 PS Claim 66; Page 140-142; 316pp; English.
 CC W04925-W04932 represent the enzymes of the invention. These enzymes
 CC possess cellulytic (particularly endoglucanase) activity. Cellulytic
 CC enzymes are involved in the the hydrolysis of cellulose, and are
 CC synthesised by a large number of microorganisms and plants. The enzymes
 CC of the invention containing the conserved catalytic regions (such as
 CC W04913) exhibit improved performance, e.g. 50 times higher performance,
 CC compared to multiple domain enzymes. The enzymes can be used for the
 CC treatment of fabrics or textiles, preferably for preventing backstaining,
 CC for bio-polishing or for stone-washing cellulosic fabric. They can also
 CC be used to provide colour clarification for laundry. The enzymes can also
 CC be used for the degradation or modification of plant material, such as
 CC cell walls. They can also be used in the treatment of paper pulp
 CC preferably for debarking, defibration, fibre modification, enzymatic
 CC de-linking or drainage improvement.
 SQ Sequence 225 AA;

Query Match 5.9%; Score 6; DB 1; Length 225;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 98 LAGSSE 103

QY 63 LAGSSE 68

RESULT 46

ID P60215 standard; Protein; 226 AA.
 AC P60215;
 DT 12-AUG-1991 (first entry)
 DE Sequence encoded by the portion of the v-sis gene encoding a protein
 DE homologous to the B-chain of platelet derived growth factor (PDGFR).
 KW Mitogen; mesenchyma; fibroblast proliferation; smooth muscle cell;
 KW atherosclerosis therapy.
 OS Simian sarcoma virus.
 PN EP-177937-A.
 PR 16-APR-1986.
 PR 10-OCT-1985; 012852.
 PR 12-OCT-1984; US-660496.
 PR 25-FEB-1985; US-705175.
 PR 13-AUG-1986; US-896485.
 PR 15-DEC-1986; US-941970.
 PR 15-DEC-1986; US-942484.
 PA (ZYMO-) ZYMOGENETICS INC.
 PI Murray MJ, Kelly JD;
 DR WPI: 86-101617/16.
 DR N-PSDB; N60147.
 PT Prodn. of platelet derived growth factor analogues - useful as
 PT mitogenic agents and obtd. by recombinant DNA procedures for good
 PT purity and high yields
 PS Disclosure; Fig. 1b; 60pp; English.
 CC A DNA construct contg. the portion of the v-sis gene encoding a
 CC protein substantially homologous to the B chain of PDGF is claimed.
 CC Also claimed are biologically active PDGF analogues obtained using
 CC the construct.
 SQ Sequence 226 AA;

Query Match 5.9%; Score 6; DB 1; Length 226;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 80 AECKTR 85

QY 71 AECKTR 76

RESULT 47
 ID W04930 standard; Protein; 226 AA.
 AC W04930;
 DT 20-MAY-1997 (first entry)
 DE Cellulytic enzyme #6 of the invention.
 KW Cellulytic enzyme; endoglucanase; hydrolysis; cellulose; microorganism;
 KW plant cellulase; catalytic region; textile; backstaining; bio-polishing;
 KW stone-washing; cellulosic fabric; colour clarification; defibration;
 KW cell wall degradation; paper pulp; debarking; fibre modification;
 KW enzymatic de-linking; drainage improvement.
 OS Crinipellis scabellia.
 PN W0962937-AI.
 PD 26-SEP-1996.
 PR 18-MAR-1996; DK0105.
 PR 17-MAR-1995; DK-000272.
 PR 08-AUG-1995; DK-000887.
 PR 08-AUG-1995; DK-000885.
 PR 08-AUG-1995; DK-000886.
 PR 08-AUG-1995; DK-000886.
 PR 12-FEB-1996; DK-000137.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen LN, Ihara M, Kauppinen MS, Lange L, Lassen SF;
 DR WPI; 96-443173/44.
 DR N-PSDB; T39052.

PT New endo:glucanase enzyme preparations - contg. conserved catalytic
 PT regions, useful for treating fabrics, textiles, plant material or
 PT paper pulp
 PS Claim 76; Page 169-170; 316pp; English.
 CC W04923-W04932 represent the enzymes of the invention. These enzymes
 CC possess cellulytic (particularly endoglucanase) activity. Cellulytic
 CC enzymes are involved in the the hydrolysis of cellulose, and are
 CC synthesised by a large number of microorganisms and plants. The enzymes
 CC of the invention containing the conserved catalytic regions (such as
 CC W04913) exhibit improved performance, e.g. 50 times higher performance,
 CC compared to multiple domain enzymes. The enzymes can be used for the
 CC treatment of fabrics or textiles, preferably for preventing backstaining,
 CC for bio-polishing or for stone-washing cellulosic fabric. They can also
 CC be used to provide colour clarification for laundry. The enzymes can also
 CC be used for the degradation or modification of plant material, such as
 CC cell walls. They can also be used in the treatment of paper pulp
 CC preferably for debarking, defibration, fibre modification, enzymatic
 CC de-linking or drainage improvement.
 SQ Sequence 226 AA;

Query Match 5.9%; Score 6; DB 1; Length 226;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 99 LAGSSE 104

QY 63 LAGSSE 68

RESULT 48

ID P81029 standard; Protein; 226 AA.
 AC P81029;
 DT 29-MAR-1992 (first entry)
 DE Sequence encoded by the v-sis gene and some flanking SSV sequences
 DE corrected from that published by Davare et al. in 1982.
 KW Wound healing; fibroblast; mammalian cell culture.
 OS Simian sarcoma virus.
 PN EP-259632-A.
 PD 16-MAR-1988.
 PR 11-AUG-1987; 111591.
 PR 12-OCT-1984; US-660496.
 PR 25-FEB-1985; US-705175.
 PR 13-AUG-1986; US-896485.
 PR 15-DEC-1986; US-942484.


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Query Match          5.9%; Score 6; DB 1; Length 226;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches          6; Conservative 0; Mismatches 0; Indels 0; Gaps

Db      80 AECKTR 85
      |||||
QY      71 AECKTR 76

RESULT 50
ID R63472 standard; protein; 241 AA.
AC R63472;
DE 28-JUN-1995 (first entry)
KE Recombinant platelet derived growth factor B cv-sis.
KW Recombinant platelet derived growth factor B cv-sis; rPDGF Bcv-sis;
KW wound healing; antibody production.
OS Synthetic.
PN EP-622456-A.
PD 02-NOV-1994.
PF 10-MAR-1988; 302116.
PR 13-MAR-1987; US-025344.
PR 19-FEB-1988; US-152045.
PA (AMGE-) AMGEN INC.
PI NICOLSON MA, THOMASON AR;
PI WPI; 94-334642/42.
DR
PT New vectors expressing platelet-derived growth factor B
PT epitope(s) - and contg. c-sis or v-sis genes portions; are used
PT to promote wound healing and produce antibodies
PS Claim 10; Fig 10; 49pp; English.
CC R63468 describes the amino acid sequence of recombinant platelet
CC derived growth factor B cv-sis (rPDGF B cv-sis). It may be used to
CC promote wound healing, or as an antigen to prepare antisera or
CC monoclonal antibodies specific for epitopes on the B chain of PDGF.
CC Sequence 241 AA;

Query Match          5.9%; Score 6; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 7.69e+01;
Matches          6; Conservative 0; Mismatches 0; Indels 0; Gaps

Db      95 AECKTR 100
      |||||
QY      71 AECKTR 76

RESULT 51
ID R50009 standard; Protein; 241 AA.
AC R50009;
DE 29-SEP-1994 (first entry)
DE Platelet-derived Growth Factor PDGF-B precursor.
KE Platelet-Derived Growth Factor; heterodimer; PDGF-AB;
KW recombinant protein production; PDGF-B chain;
KW bicistronic vector system.
OS Homo sapiens.
FH Key
FH Location/Qualifiers
FT peptide 1..81
FT /label= pre-peptide
FT protein 82..190
FT /label= mature_PDGF-B
FT /note= "mature peptide is encoded by nucleotides
FT 283-609 of Q58725"

ID WO9405785-A.
PN PN
PD 17-MAR-1994.
PF PD
PF 26-AUG-1993; E02294.
PR 27-AUG-1992; DE-228458.
PA (BEIE ) BEIERSDORF AG..
PA (GBFB ) GBF GES BIOTECH FORSCHUNG GMBH.
PI Achterberg V, Dirks W, Dorschner A, Eichner W, Hauser H;
PI Meyer-Ingold W, Mielke H, Wirth M, Doerschner A;
PD WPI; 94-101190/12.
DR N-PSDB; Q58725.

PT New multicistronic expression units - for producing equimolar
PT ants. of polypeptide(s) in mammalian cells as hosts
PS Claim 11; Page 29; 109pp; German.

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CC A PDGF-AB heterodimer is recombinantly produced using a bicistronic
 CC expression unit in which a sequence responsible for internal
 CC translation start is located between cistrons coding for the PDGF-B
 CC and PDGF-A chains. The preferred PDGF-B sequence for inclusion in
 CC the bicistronic construct is Q58725 which codes for the precursor
 CC amino acid sequence R50009.
 SQ Sequence 241 AA;

Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 QY 71 AECKTR 76

RESULT 52

ID R50002 standard; Protein: 241 AA.

AC R50002;

DE 09-SEP-1994 (first entry)

DQ Platelet-derived Growth Factor PDGF-B precursor.

KW Platelet-Derived Growth Factor; heterodimer; PDGF-AB;

KW recombinant protein production; PDGF-B chain;

KW bicistronic vector system.

OS Homo sapiens.

FH Key Location/Qualifiers

FT peptide 1..81

FT /label= pre-peptide

FT protein 82..190

FT /label= mature_PDGF-B

FT /note= "mature peptide is encoded by nucleotides

FT 283-609 of Q58714"

FT W09405786-A.

PN 17-MAR-1994.

PD 26-AUG-1993; E02295.

PF 27-AUG-1992; DE-228457.

PR (BEIE) BEIERSDORF AG.

PA (GBFB) GBF GES BIOTEC FORSCHUNG GMBH.

PI Achterberg V, Dirks W, Dorschner A, Eichner W, Hauser H;

PI Meyer-Ingold W, Mielke H, Wirth M, Doerschner A;

DR WPI; 94-101191/12.

DR N-PSDB; Q58714.

PT Heterodimer platelet-derived-growth factor (PDGF) prodn. - using

PT a polyclonistic vector system in mammalian host cells for

PT equimolar prodn of A- and B-chains

PS Claim 2; Page 40; 64pp; German.

CC A PDGF-AB heterodimer is recombinantly produced using a bicistronic

CC expression unit in which a sequence responsible for internal

CC translation start is located between cistrons coding for the PDGF-B

CC and PDGF-A chains. The preferred PDGF-B sequence for inclusion in

CC the bicistronic construct is Q58714 which codes for the precursor

CC amino acid sequence R50002.

SQ Sequence 241 AA;

Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 QY 71 AECKTR 76

RESULT 53

ID P80596 standard; protein: 241 AA.

AC P80596;

DE 12-OCT-1990 (first entry)

DQ Recombinant platelet derived growth factor Bc-sis.

KW Recombinant platelet derived growth factor; wound healing;

KW fusion peptides; Bc-sis; antibodies.

OS Simian sarcoma virus.

PN EP-282317-A.

PD 14-SEP-1988.
 PF 10-MAR-1988; 302116.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN INC.
 PI Thomason AR, Nicolson; MA;
 DR WPI; 88-259036/37.
 PT Purified recombinant platelet derived growth factor -
 PT for accelerating wound healing, and fusion polypeptide(s),
 PT encoding DNA sequences and derived antibodies.
 PS Disclosure; P: English.
 CC The peptide has a sufficient part of the structural conformation of
 CC PDGF B, an epitope for binding to a monoclonal antibody specific
 CC for an epitope of a B chain PDGF, one or more of the biological
 CC properties of naturally occurring PDGF and has purity of greater than
 CC 95%. The cpds. is used in veterinary and human medicine for topical
 CC application to wounds to accelerate healing. They are produced free of
 CC PDGF A, dimers and heterodimers. The antibodies are useful for
 CC affinity purification. See also P80595-P80598 and N81202-N81203.
 SQ Sequence 241 AA;

Query Match 5.9%; Score 6; DB 1; Length 241;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 QY 71 AECKTR 76

RESULT 54

ID R38919 standard; Protein: 241 AA.

AC R38919;

DE 28-OCT-1993 (first entry)

DQ Human Platelet Derived Growth Factor B-Chain.

KW Angiogenesis; wound healing; mitogen; vascular endothelial cells;

KW Vascular Endothelial Cell Growth Factor; bVEGF-120; PDGF;

OS Chimeric growth factor protein.

OS Homo sapiens.

PN US5219739-A.

PD 15-JUN-1993.

PF 27-JUL-1989; 387545.

PR 14-DEC-1989; US-387545.

PR 27-JUL-1990; US-559041.

PA (SCIO-) SCIOS NOVA INC.

PI Abraham JA, Fiddes JC, Mitchell RL, Tischer EG;

DR WPI; 93-205302/25.

DR N-PSDB; Q44258.

PT Isolated DNA sequences, expression vectors and transformant cells

PT - used for large scale prodn. of vascular endothelial cell growth

PT factor, for treating wounds in which neo-vascularisation is

PT required

PS Disclosure; Fig 4b; 40pp; English.

CC Chimeric growth factor proteins are contemplated by the inventors

CC (but not claimed). An example is a dimeric protein consisting of

CC the full-length B-chain subunit of PDGF linked by a disulphide bond

CC to a full-length vascular endothelial cell growth factor

CC polypeptide chain. Preparation of such hybrid proteins allows the

CC properties of the molecule to be tailored such that the hybrid

CC exhibits a profile of mitogenic activity between VEGF and PDGF.

SQ Sequence 241 AA;

Query Match 5.9%; Score 6; DB 1; Length 241;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 QY 71 AECKTR 76

RESULT 55

ID R40967 standard; Protein: 241 AA.

AC R40967;
 DT 25-FEB-1994 (first entry)
 DE CV-sis gene product.
 KW Monoclonal antibody; specific; epitope; B-Chain; PDGF;
 KW platelet-derived growth factor; wound healing; binding.
 OS Synthetic.
 PN EP-559234-A.
 PD 08-SEP-1993.
 PF 10-MAR-1988; 302116.
 PR 13-MAR-1987; US-025344.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN.
 PI Nicolson MA, Thomason AR;
 DR WPI; 93-282094/36.
 DT New monoclonal antibody for prepn. of poly:peptide for wound
 PT healing - is specific for epitope in B-chain of platelet-derived
 PT growth factor
 PS Example 2; Fig 10; 39pp; English.
 CC pBSCF/cv-sis is a mammalian expression vector in which the mature
 CC rPDGF B protein region is encoded by the v-sis gene, but the
 CC translation initiation signal and amino terminal region of the rPDGF
 CC B pre-protein is encoded by the c-sis gene. The amino
 CC acid sequence of the expected protein is given.
 SQ Sequence 241 AA;
 Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. NO. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 95 AECKTR 100
 QY 71 AECKTR 76
 RESULT 56
 ID W64065 standard; Protein; 241 AA.
 AC W64065;
 DT 06-OCT-1998 (first entry)
 DE Chimeric rPDGF-B protein with human prepro-sequence.
 KW Platelet derived growth factor; PDGF-B; fusion protein; secretion;
 KW expression; yeast; human.
 OS Homo sapiens.
 OS Saccharomyces cerevisiae.
 OS Synthetic.
 FH Key
 FT Peptide
 FT 1..22
 FT /label= Prepeptide
 FT /note= "human PDGF-B prepeptide"
 FT 23..81
 FT /label= transit
 FT /note= "human PDGF prepeptide"
 FT 82..190
 FT /label= rPDGF-B
 FT /note= "human platelet derived growth factor type B"
 FT 191..241
 FT /label= transit
 FT /note= "human PDGF prepeptide"
 PN W09826080-A1.
 PD 18-JUN-1998.
 PF 12-DEC-1997; U22647.
 PR 13-DEC-1996; US-032720.
 PA (CHIR) CHIRON CORP.
 PI Merryweather JP, Tekamp-Olson P;
 DR WPI; 98-348534/30.
 DR N-PSDB; V44138.
 PT Nucleotide sequence for expression of heterologous proteins in yeast
 PT - useful to produce heterologous mammalian proteins in biologically
 PT active, mature form, e.g. human platelet-derived growth factor
 PS Example 3; Page 55-56; 81pp; English.
 CC This sequence represents a novel fusion protein constructed from the
 CC Saccharomyces cerevisiae alpha leader peptide and human platelet derived
 CC growth factor type B (PDGF-B) and also contains two human propeptide
 CC sequences. This protein is used in a method which allows the expression

CC of heterologous mammalian proteins and their secretion in the
 CC biologically active, mature form, by transforming yeast host cells with
 CC the vector and expressing the proteins. It is particularly useful to
 CC produce mammalian proteins whose assumption of a native conformation is
 CC facilitated by the presence of a native propeptide sequence in the
 CC precursor polypeptide. Expression and secretion of proteins in
 CC biologically active, mature form is possible, whilst previous methods
 CC have often encountered problems of post-translational processing leading
 CC to, e.g. production of inactive forms or insufficient amounts of protein.
 SQ Sequence 241 AA;
 Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. NO. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 95 AECKTR 100
 QY 71 AECKTR 76
 RESULT 57
 ID R40964 standard; protein; 241 AA.
 AC R40964;
 DT 25-FEB-1994 (first entry)
 DE PDGF Bc-sis.
 KW Monoclonal antibody; specific; epitope; B-Chain; PDGF;
 KW platelet-derived growth factor; wound healing; binding.
 OS Homo sapiens.
 PN EP-559234-A.
 PD 08-SEP-1993.
 PF 10-MAR-1988; 302116.
 PR 13-MAR-1987; US-025344.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN.
 PI Nicolson MA, Thomason AR;
 DR WPI; 93-282094/36.
 DT New monoclonal antibody for prepn. of poly:peptide for wound
 PT healing - is specific for epitope in B-chain of platelet-derived
 PT growth factor
 PS Example 1; Fig 2; 39pp; English.
 CC Example 1 describes the subcloning and analysis of C-sis and V-sis
 CC genes encoding rPDGF B chain. Monoclonal antibodies against
 CC rPDGF Bv-sis have the affinity to specifically bind to an epitope
 CC found in the B chain of PDGF.
 SQ Sequence 241 AA;
 Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. NO. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 95 AECKTR 100
 QY 71 AECKTR 76
 RESULT 58
 ID P80597 standard; protein; 241 AA.
 AC P80597;
 DT 24-OCT-1990 (first entry)
 DE CV-sis gene encoded Platelet Derived Growth Factor.
 KW Recombinant platelet derived growth factor; wound healing; cv-sis gene;
 KW rPDGF; antibodies.
 OS Homo sapiens.
 PN EP-282317-A.
 PD 14-SEP-1988.
 PF 10-MAR-1988; 302116.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) Amgen INC.
 PI Thomason AR, Nicolson MA;
 DR WPI; 88-259036/37.
 PT Purified recombinant platelet derived growth factor - for accelerating
 PT wound healing, and fusion polypeptide(s), encoding DNA sequences
 PT and derived antibodies.

PS Disclosure; pp; English.
 CC The mature rPDGF B protein region is encoded by the v-sis gene, but
 CC the translation initiation signal and amino terminal of the rPDGF B
 CC pre-protein is encoded by the c-sis gene.
 CC The product is useful in human and veterinary medicine for the
 CC topical application to wounds to accelerate healing. They are now
 CC produced free of PDGF A, dimers and heterodimers. The antibodies are
 CC useful for affinity purification.
 CC See also P80595-96; P80597-98 and N81202-03.
 SQ Sequence 241 AA;

Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 QY 71 AECKTR 76
 |||||

PT 59
 AC R63469 standard; protein; 241 AA.
 DE 28-JUN-1995 (first entry)
 DE Recombinant platelet derived growth factor B c-sis.
 KW Recombinant platelet derived growth factor B c-sis; rPDGF B c-sis;
 KW wound healing; antibody production.
 OS Synthetic.
 PN EP-622456-A.
 PD 02-NOV-1994.
 PF 10-MAR-1988; 302116.
 PR 13-MAR-1987; US-025344.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN INC.
 PI Nicolson MA, Thomason AR;
 DR WPI; 94-334642/42.
 PT New vectors expressing platelet-derived growth factor B
 PT epitope(s) - and contg. c-sis or v-sis genes portions; are used
 PT to promote wound healing and produce antibodies.
 PS Disclosure; Fig 2; 49pp; English.
 CC R63469 describes the amino acid sequence of recombinant platelet
 CC derived growth factor B c-sis (rPDGF B c-sis). It may be used to
 CC promote wound healing, or as an antigen to prepare antisera or
 CC monoclonal antibodies specific for epitopes on the B chain of PDGF.
 SQ Sequence 241 AA;

Query Match 5.9%; Score 6; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 95 AECKTR 100
 QY 71 AECKTR 76
 |||||

RESULT 60
 ID W31729 standard; Protein; 261 AA.
 AC W31729;
 DT 14-APR-1998 (first entry)
 DE Mycobacterium tuberculosis sigma factor.
 KW Sigma factor; sigF gene; tuberculosis; latency; diagnosis;
 KW therapy; vaccine.
 OS Mycobacterium tuberculosis H37Rv.
 FH Key Location/Qualifiers
 FT Misc_difference 214 /note= "encoded by SCC"
 FT W09735611-A1.
 PN 02-OCT-1997.
 PD 27-MAR-1997; U03457.
 PR 27-MAR-1996; US-622353.
 PR 27-MAR-1996; US-622352.
 PA (UJO) UNIV JOHNS HOPKINS.
 PI Bishel WR, Demalo J, Young DB, Zhang Y;

DR WPI; 97-489391/45.
 DR N-PSDB; T88842.
 PT DNA encoding Mycobacterium tuberculosis sigma factor or ORF X or Y
 PT - used to detect presence of latent pathogenic mycobacterium and to
 PT identify compounds that regulate binding of M. tuberculosis sigF to
 PT orfX
 PS Claim 7; Page 51-52; 72pp; English.
 CC This protein comprises the stress response sigma factor (sigF) of
 CC Mycobacterium tuberculosis. Its amino acid sequence was determined
 CC from an isolated genomic DNA molecule (see T88842) of M.
 CC tuberculosis H37Rv. 2 Genes, orfX and orfY, regulate sigF
 CC activity. The presence of a latent pathogenic mycobacterium in a
 CC human can be determined by detecting M. tuberculosis sigF nucleic
 CC acid or protein in a body sample (claimed). A cell containing a
 CC sigF reporter construct can be used to screen for potential
 CC therapeutic agents that trigger the growth arrest of M.
 CC tuberculosis by activating the expression of sigF, or reactivate
 CC latent M. tuberculosis by inhibiting the expression of sigF
 CC (claimed). Measuring in vitro transcription from a transcription
 CC construct incubated with M. tuberculosis in the presence or absence
 CC of a test compound can be used to determine if the compound is a
 CC potential therapeutic agent for use in modulating the growth of M.
 CC tuberculosis by regulating the activity of M. tuberculosis sigF
 CC (claimed). The M. tuberculosis sigF, orfX and orfY proteins (see
 CC W31729-31) can be used to identify compounds which regulate the
 CC binding of M. tuberculosis sigF to orfX. A claimed tuberculosis
 CC vaccine comprises an M. tuberculosis strain that has a mutation
 CC which disrupts sigF expression or translation.
 SQ Sequence 261 AA;

Query Match 5.9%; Score 6; DB 1; Length 261;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 145 SELAAE 150
 QY 67 SELAAE 72
 |||||

RESULT 61
 ID W89843 standard; Protein; 264 AA.
 AC W89843;
 DT 18-FEB-1999 (first entry)
 DE Protein encoded by clone g9 ORF3.
 KW Antigen; immunogenic cluster family; vaccine; gastritis; diagnosis;
 KW peptic ulcer; gastric adenocarcinoma; gastric lymphoma.
 OS Helicobacter pylori.
 PN W09849314-A2.
 PD 05-NOV-1998.
 PF 27-APR-1998; U08487.
 PR 14-OCT-1997; US-061958.
 PR 25-APR-1997; US-045107.
 PA (GENE-) GENELABS TECHNOLOGIES INC.
 PI Chow TP, Fry KE, Lim MY, McAtee CP;
 DR WPI; 99-009433/01.
 DR N-PSDB; V90772.
 PT New Helicobacter pylori antigens and related nucleic acid sequences
 PT - useful in serological diagnosis and protective vaccines, providing
 PT long-lasting immune response
 PS Claim 15; Page 190-191; 402pp; English.
 CC The present sequence represents a Helicobacter pylori antigenic protein
 CC that is characterised by immunoreactivity with H. pylori-positive
 CC antisera. The proteins are highly immunogenic and induce a long-lasting
 CC immune response that persists even after antimicrobial treatment. In
 CC antibody-detection assays, on sera, plasma, urine, saliva etc., they are
 CC highly sensitive and specific. The specification also describes 69
 CC previously unrecognised immunogenic cluster families. H. pylori antigens
 CC are used to detect H. pylori-specific antibodies, for diagnosing
 CC infection or to confirm eradication of infection, and in vaccines to
 CC protect against H. pylori infection and related diseases (gastritis,
 CC peptic ulcer, gastric adenocarcinoma/lymphoma).
 SQ Sequence 264 AA;

Query Match 5.9%; Score 6; DB 1; Length 264;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 88 SVLTST 93
 16 SVLTST 21
 16 SVLTST 21

RESULT 62
 ID W89920 standard; Protein; 265 AA.
 AC W89920;
 DT 18-FEB-1999 (first entry)
 DE Antigen 5 from cluster 38e.
 KW Antigen; immunogenic cluster family; vaccine; gastritis; diagnosis;
 KW Peptic ulcer; gastric adenocarcinoma; gastric lymphoma.
 OS Helicobacter pylori.
 PN WO9843314-A2.
 PD 05-NOV-1998.
 PF 27-APR-1998; U08487.
 PR 14-OCT-1997; US-061958.
 PR 25-APR-1997; US-045107.
 PA (GENE-) GENELABS TECHNOLOGIES INC.
 PI Chow TP, Fry KE, Lim MT, McAttee CP;
 DR WPI; 99-009433/01.
 PT New Helicobacter pylori antigens and related nucleic acid sequences
 PT - useful in serological diagnosis and protective vaccines, providing
 PT long-lasting immune response
 PS Claim 1; Page 250; 402pp; English.
 CC The present sequence represents a Helicobacter pylori antigenic protein
 CC that is characterised by immunoreactivity with H. pylori-positive
 CC antisera. The proteins are highly immunogenic and induce a long-lasting
 CC immune response that persists even after antimicrobial treatment. In
 CC antibody-detection assays, on sera, plasma, urine, saliva etc., they are
 CC highly sensitive and specific. The specification also describes 69
 CC previously unrecognised immunogenic cluster families. H. pylori antigens
 CC are used to detect H. pylori-specific antibodies, for diagnosing
 CC infection or to confirm eradication of infection, and in vaccines to
 CC protect against H. pylori infection and related diseases (gastritis,
 CC peptic ulcer, gastric adenocarcinoma/lymphoma).
 CC Sequence 265 AA;

Query Match 5.9%; Score 6; DB 1; Length 265;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 88 SVLTST 93
 16 SVLTST 21
 16 SVLTST 21

RESULT 63
 ID R40963 standard; protein; 271 AA.
 AC R40963;
 DT 25-FEB-1994 (first entry)
 DE PDGF Bv-sis.
 KW Monoclonal antibody; specific; epitope; B-Chain; PDGF;
 KW platelet-derived growth factor; wound healing; binding.
 OS Simian sarcoma virus.
 PN EP-559234-A.
 PD 08-SEP-1993.
 PF 10-MAR-1988; 302116.
 PR 13-MAR-1987; US-025344.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN.
 PI Nicolson MA, Thomason AR;
 DR WPI; 93-282094/36.
 PT New monoclonal antibody for prepn. of poly:peptide for wound
 PT healing - is specific for epitope in B-chain of platelet-derived
 PT growth factor
 PS Example 1; Fig 1; 39pp; English.
 CC Example 1 describes the subcloning and analysis of C-sis and V-sis
 CC genes encoding rPDGF B chain. Monoclonal antibodies against

CC rPDGF Bv-sis have the affinity to specifically bind to an epitope
 CC found in the B chain of PDGF.
 SQ Sequence 271 AA;

Query Match 5.9%; Score 6; DB 1; Length 271;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 125 AECKTR 130
 71 AECKTR 76
 71 AECKTR 76

RESULT 64
 ID P80595 standard; protein; 271 AA.
 AC P80595;
 DT 12-OCT-1990 (first entry)
 DE Recombinant platelet derived growth factor Bv-sis.
 KW Recombinant platelet derived growth factor; wound healing;
 KW fusion peptides; Bv-sis; antibodies.
 OS Simian sarcoma virus.
 PN EP-282317-A.
 PD 14-SEP-1988.
 PF 10-MAR-1988; 302116.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN INC.
 PI Thomason AR, Nicolson MA;
 DR WPI; 88-259036/37.
 PT Purified recombinant platelet derived growth factor -
 PT for accelerating wound healing, and fusion polypeptide(s),
 PT encoding DNA sequences and derived antibodies.
 PS Disclosure; p; English.
 CC The peptide has a sufficient part of the structural conformation of
 CC PDGF B, an epitope for binding to a monoclonal antibody spacific
 CC for an epitope of a B chain PDGF, one or more of the biological
 CC properties of naturally occurring PDGF and it has purity greater than
 CC 95%. The cpds. is used in veterinary and human medicine for topical
 CC application to wounds to accelerate healing. They are produced free of
 CC PDGF A, dimers and heterodimers. The antibodies are useful for
 CC affinity purification. See also P80595-P80598 and N81202-N81203.
 CC Sequence 271 AA;

Query Match 5.9%; Score 6; DB 1; Length 271;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 125 AECKTR 130
 71 AECKTR 76
 71 AECKTR 76

RESULT 65
 ID R63468 standard; protein; 271 AA.
 AC R63468;
 DT 28-JUN-1995 (first entry)
 DE Recombinant platelet derived growth factor B v-sis.
 KW Recombinant platelet derived growth factor B v-sis; rPDGF B v-sis;
 KW wound healing; antibody production.
 OS Synthetic.
 PN EP-622456-A.
 PD 02-NOV-1994.
 PF 10-MAR-1988; 302116.
 PR 13-MAR-1987; US-025344.
 PR 19-FEB-1988; US-152045.
 PA (AMGE-) AMGEN INC.
 PI Nicolson MA, Thomason AR;
 DR WPI; 94-334642/42.
 PT New vectors expressing platelet-derived growth factor B
 PT epitope(s) - and contg. c-sis or v-sis genes portions; are used
 PT to promote wound healing and produce antibodies
 PS Disclosure; Fig 1; 49pp; English.
 CC R63468 describes the amino acid sequence of recombinant platelet
 CC derived growth factor B v-sis (rPDGF B v-sis). It may be used to

CC promote wound healing, or as an antigen to prepare antisera or
 CC monoclonal antibodies specific for epitopes on the B chain of PDGF.
 SQ Sequence 271 AA;

Query Match 5.9%; Score 6; DB 1; Length 271;

Best Local Similarity 100.0%; Pred. No. 7.69e+01; Indels 0; Gaps 0;
 Matches 6; Conservative 0; Mismatches 0;

Db 125 AECKTR 130

QY 71 AECKTR 76

RESULT 66

ID R60616 standard; Protein; 282 AA.

AC R60616;

DT 22-MAY-1995 (first entry)

DE Human PDGF-B 119 linked to PDGF-B 109 via pre-pro region linker.

KW Human platelet derived growth factor; PDGF-B subunit; v-sis gene;

KW PDGF-BB fusion protein; fusion dimer; protein refolding;

KW wound healing.

OS Homo sapiens.

CH Chimera: Humicola insolens.

FT Key Location/Qualifiers

FT protein 1. .119

FT /label= PDGF-B_119_subunit

FT region 120. .176

FT /label= linker

FT /note= "amino acids -54 to -1 of the pre-pro region

FT of the PDGF-B precursor protein"

FT 177. .282

FT /label= PDGF-B_109_subunit

PN EP-618227-A.

PD 05-OCT-1994.

PF 31-MAR-1994; 105075.

PR 01-APR-1993; US-041635.

PA (AMGE-) AMGEN INC.

PI Thomson AR;

DR WPI; 94-304405/38.

PT New multimeric polypeptide comprising fused subunits of natural

PT protein, - and related DNA and transformed cells, esp. dimers of

PT platelet derived growth factor, useful for stimulating healing of

PT wounds.

PS Claim 12; Fig 1; 30pp; English.

CC The PDGF-B 109 subunit coding sequence was obtained as composite

CC sequence of fragments from human PDGF-B pre-pro region, human v-sis

CC gene and synthetic fragments. The mature 109 amino acid subunit was

CC incorporated into a single polypeptide with a PDGF-B 119 subunit,

CC separated by a peptide linker to produce the preferred fusion

CC polypeptide of the invention (R60616). The fusion dimer is more

CC easily and rapidly refolded than unfused multimers and is

CC useful for treating wounds.

SQ Sequence 282 AA;

Query Match 5.9%; Score 6; DB 1; Length 282;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 14 AECKTR 19

QY 71 AECKTR 76

RESULT 67

ID W04936 standard; Protein; 293 AA.

AC W04936;

DT 20-MAY-1997 (first entry)

DE Chimeric endoglucanase #4.

KW Cellulolytic enzyme; endoglucanase; hydrolysis; cellulose; microorganism;

KW plant cellulase; catalytic region; textile; backstaining; bio-polishing;

KW stone-washing; cellululosic fabric; colour clarification; defibration;

KW cell wall degradation; paper pulp; debarking; fibre modification;

KW enzymatic de-inking; drainage improvement; chimera.

OS Chimera: Crinipellis scabellia.

OS Chimera: Humicola insolens.

FT Key Location/Qualifiers

FT region 1. .221

FT /note= "C.scabellia endoglucanase"

FT 222. .293

FT /note= "C-terminus of H.Insolens endoglucanase"

PN W09629397-A1.

PD 26-SEP-1996.

PF 18-MAR-1996; DK0105.

PR 17-MAR-1995; DK-000272.

PR 08-AUG-1995; DK-000887.

PR 08-AUG-1995; DK-000885.

PR 08-AUG-1995; DK-000888.

PR 08-AUG-1995; DK-000886.

PR 12-FEB-1996; DK-000137.

PA (NOVO) NOVO-NORDISK AS.

PI Andersen LN, Ihara M, Kauppinen MS, Lange L, Lassen SF;

PI Nielsen RI, Schuelein M, Takagi S;

DR WPI; 96-443173/44.

DR N-PSDB; T39074.

PT New endo:glucanase enzyme preparations - contg. conserved catalytic

PT regions, useful for treating fabrics, textiles, plant material or

PT paper pulp

PS Example 4; Page 176-178; 316pp; English.

CC This sequence represents a chimeric enzyme, containing an enzyme of the

CC invention (see W04930 for full length C. scabellia endoglucanase). The

CC enzymes of the invention possess cellulolytic (particularly endoglucanase)

CC activity. Cellulolytic enzymes are involved in the hydrolysis of

CC cellulose, and are synthesised by a large number of microorganisms and

CC plants. The enzymes of the invention containing the conserved catalytic

CC regions (such as W04913) exhibit improved performance, e.g. 50 times

CC higher performance, compared to multiple domain enzymes. The enzymes can

CC be used for the treatment of fabrics or textiles, preferably for

CC preventing backstaining, for bio-polishing or for stone-washing

CC cellululosic fabric. They can also be used to provide colour clarification

CC for laundry. The enzymes can also be used for the degradation or

CC modification of plant material, such as cell walls. They can also be

CC used in the treatment of paper pulp preferably for debarking,

CC defibration, fibre modification, enzymatic de-inking or drainage

CC improvement.

SQ Sequence 293 AA;

Query Match 5.9%; Score 6; DB 1; Length 293;

Best Local Similarity 100.0%; Pred. No. 7.69e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 94 LAGSSE 99

QY 63 LAGSSE 68

RESULT 68

ID W04933 standard; Protein; 297 AA.

AC W04933;

DT 20-MAY-1997 (first entry)

DE Chimeric endoglucanase #1.

KW Cellulolytic enzyme; endoglucanase; hydrolysis; cellulose; microorganism;

KW plant cellulase; catalytic region; textile; backstaining; bio-polishing;

KW stone-washing; cellululosic fabric; colour clarification; defibration;

KW cell wall degradation; paper pulp; debarking; fibre modification;

KW enzymatic de-inking; drainage improvement; chimera.

OS Chimera: Myceliophthora thermophila.

OS Chimera: Humicola insolens.

FT Key Location/Qualifiers

FT region 1. .225

FT /note= "M.thermophila endoglucanase"

FT 226. .297

FT /note= "C-terminus of H.Insolens endoglucanase"

PN W09629397-A1.

PD 26-SEP-1996.

PR 18-MAR-1996; DK0105.

PR 17-MAR-1995; DK-000272.

PR 08-AUG-1995; DK-000887.

PR 08-AUG-1995; DK-000885.
 PR 08-AUG-1995; DK-000888.
 PR 08-AUG-1995; DK-000886.
 PR 12-FEB-1996; DK-000137.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen LN, Ihara M, Kauppinen MS, Lange L, Lassen SF;
 PI Nielsen RI, Schuelein M, Takagi S;
 DR WPI; 96-443173/44.
 DR N-PSDB; T39061.
 PT New endo:glucanase enzyme preparations - contg. conserved catalytic
 PT regions, useful for treating fabrics, textiles, plant material or
 PT paper pulp
 PS Example 1; Page 144-146; 316pp; English.
 CC This sequence represents a chimeric enzyme, containing an enzyme of the
 CC invention (see W04925 for full length M. thermophila endoglucanase). The
 CC enzymes of the invention possess cellulolytic (particularly endoglucanase)
 CC activity. Cellulolytic enzymes are involved in the the hydrolysis of
 CC cellulose, and are synthesised by a large number of microorganisms and
 CC plants. The enzymes of the invention containing the conserved catalytic
 CC regions (such as W04913) exhibit improved performance, e.g. 50 times
 CC higher performance, compared to multiple domain enzymes. The enzymes can
 CC be used for the treatment of fabrics or textiles, preferably for
 CC preventing backstaining, for bio-polishing or for stone-washing
 CC cellulosic fabric. They can also be used to provide colour clarification
 CC for laundry. The enzymes can also be used for the degradation or
 CC modification of plant material, such as cell walls. They can also be
 CC used in the treatment of paper pulp preferably for debarking,
 CC defibration, fibre modification, enzymatic de-inking or drainage
 CC improvement.
 SQ Sequence 297 AA;

Query Match 5.9%; Score 6; DB 1; Length 297;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 98 LAGSSE 103
 |||||
 QY 63 LAGSSE 68

RESULT 69
 ID W04935 standard; Protein; 298 AA.
 AC W04935;
 DT 20-MAY-1997 (first entry)
 DE Chimeric endoglucanase #3.
 KW Cellulolytic enzyme; endoglucanase; hydrolysis; cellulose; microorganism;
 KW plant cellulase; catalytic region; textile; backstaining; bio-polishing;
 KW stone-washing; cellulosic fabric; colour clarification; defibration;
 KW cell wall degradation; paper pulp; debarking; fibre modification;
 KW enzymatic de-inking; drainage improvement; chimera.
 OS Chimera: Crinipellis scabellia.
 OS Chimera: Humicola insolens.
 FH Key Location/Qualifiers
 FT region 1..226
 FT /note= "C.scabellia endoglucanase"
 FT region 227..298
 FT /note= "C-terminus of H.insolens endoglucanase"
 PN W09629397-A1.
 PD 26-SEP-1996.
 PF 18-MAR-1996; DK0105.
 PR 17-MAR-1995; DK-000272.
 PR 08-AUG-1995; DK-000887.
 PR 08-AUG-1995; DK-000885.
 PR 08-AUG-1995; DK-000888.
 PR 12-FEB-1996; DK-000137.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen LN, Ihara M, Kauppinen MS, Lange L, Lassen SF;
 PI Nielsen RI, Schuelein M, Takagi S;
 DR WPI; 96-443173/44.
 DR N-PSDB; T39073.
 PT New endo:glucanase enzyme preparations - contg. conserved catalytic
 PT regions, useful for treating fabrics, textiles, plant material or

PT paper pulp
 PS Example 4; Page 172-174; 316pp; English.
 CC This sequence represents a chimeric enzyme, containing an enzyme of the
 CC invention (see W04930 for full length C. scabellia endoglucanase). The
 CC enzymes of the invention possess cellulolytic (particularly endoglucanase)
 CC activity. Cellulolytic enzymes are involved in the the hydrolysis of
 CC cellulose, and are synthesised by a large number of microorganisms and
 CC plants. The enzymes of the invention containing the conserved catalytic
 CC regions (such as W04913) exhibit improved performance, e.g. 50 times
 CC higher performance, compared to multiple domain enzymes. The enzymes can
 CC be used for the treatment of fabrics or textiles, preferably for
 CC preventing backstaining, for bio-polishing or for stone-washing
 CC cellulosic fabric. They can also be used to provide colour clarification
 CC for laundry. The enzymes can also be used for the degradation or
 CC modification of plant material, such as cell walls. They can also be
 CC used in the treatment of paper pulp preferably for debarking,
 CC defibration, fibre modification, enzymatic de-inking or drainage
 CC improvement.
 SQ Sequence 298 AA;

Query Match 5.9%; Score 6; DB 1; Length 298;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 99 LAGSSE 104
 |||||
 QY 63 LAGSSE 68

RESULT 70
 ID W81823 standard; Protein; 307 AA.
 AC W81823;
 DT 02-FEB-1999 (first entry)
 DE Human VTAP-2 protein.
 KW VTAP-2; human; vesicle transport associated protein; treatment; human;
 KW disorder; cancer; reproduction; immune; developmental.
 OS Homo sapiens.
 PN US5840539-A.
 PD 24-NOV-1998.
 PF 10-OCT-1997; 948616.
 PR 10-OCT-1997; US-948616.
 PA (INCY-) INCYTE PHARM INC.
 PI Corley NC, Hillman JL, Lal P, Shah P;
 DR WPI; 99-034038/03.
 DR N-PSDB; V64837.
 PT DNA encoding vesicle transport-associated protein - useful for
 PT producing recombinant protein
 PS Example VIII; Fig 2A-B; 48pp; English.
 CC This sequence represents a novel human vesicle transport associated
 CC protein (VSAP-2). This protein could be used in methods for treating
 CC disorders associated with the expression of VTAP, such as cancer,
 CC immune, reproductive and developmental disorders.
 SQ Sequence 307 AA;

Query Match 5.9%; Score 6; DB 1; Length 307;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 133 STKINL 138
 |||||
 QY 82 STKINL 87

RESULT 71
 ID W04934 standard; Protein; 308 AA.
 AC W04934;
 DT 20-MAY-1997 (first entry)
 DE Chimeric endoglucanase #2.
 KW Cellulolytic enzyme; endoglucanase; hydrolysis; cellulose; microorganism;
 KW plant cellulase; catalytic region; textile; backstaining; bio-polishing;
 KW stone-washing; cellulosic fabric; colour clarification; defibration;
 KW cell wall degradation; paper pulp; debarking; fibre modification;
 KW enzymatic de-inking; drainage improvement; chimera.

OS Chimera: Myceliophthora thermophila.
 OS Chimera: Humicola insolens.
 FH Key Location/Qualifiers
 FT region 1..225
 FT /note= "M.thermophila endoglucanase"
 FT region 226..308
 FT /note= "C-terminus of H.insolens endoglucanase"
 FT W09629397-A1.
 PN 26-SEP-1996.
 PD 18-MAR-1996; DK0105.
 PF 17-MAR-1995; DK-000272.
 PR 08-AUG-1995; DK-000887.
 PR 08-AUG-1995; DK-000885.
 PR 08-AUG-1995; DK-000886.
 PR 08-AUG-1995; DK-000886.
 PR 12-FEB-1996; DK-000137.
 PA (NOVO) NOVO-NORDISK AS.
 PI Andersen LN, Ihara M, Kauppinen MS, Lange L, Lassen SF;
 PI Nielsen RI, Schuelein M, Takagi S;
 DR WPI; 96-443173/44.
 FT N-PSDB; T39062.
 PT New endo:glucanase enzyme preparations - contg. conserved catalytic
 PT regions, useful for treating fabrics, textiles, plant material or
 PT paper pulp
 PS Example 1; Page 148-150; 316pp; English.
 CC This sequence represents a chimeric enzyme, containing an enzyme of the
 CC invention (see W04925 for full length M. thermophila endoglucanase). The
 CC enzymes of the invention possess cellulytic (particularly endoglucanase)
 CC activity. Cellulytic enzymes are involved in the the hydrolysis of
 CC cellulose, and are synthesised by a large number of microorganisms and
 CC plants. The enzymes of the invention containing the conserved catalytic
 CC regions (such as W04913) exhibit improved performance, e.g. 50 times
 CC higher performance, compared to multiple domain enzymes. The enzymes can
 CC be used for the treatment of fabrics or textiles, preferably for
 CC preventing backstaining, for bio-polishing or for stone-washing
 CC cellulosic fabric. They can also be used to provide colour clarification
 CC for laundry. The enzymes can also be used for the degradation or
 CC modification of plant material, such as cell walls. They can also be
 CC used in the treatment of paper pulp preferably for debarking,
 CC defibration, fibre modification, enzymatic de-linking or drainage
 CC improvement.
 CC Sequence 308 AA;
 SQ
 Query Match 5.9%; Score 6; DB 1; Length 308;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 98 LAGSSE 103
 Q 63 LAGSSE 68
 RESULT 72
 ID W27267 standard; Protein; 348 AA.
 AC W27267;
 DT 28-APR-1998 (first entry)
 DE Streptococcus pneumoniae glutamyl tRNA synthetase.
 KW Glutamyl tRNA synthetase; glus protein; bacterial infection; vaccine;
 KW meningitis; antibacterial; immune response.
 OS Streptococcus pneumoniae.
 PN W09738718-A1.
 PD 23-OCT-1997.
 PF 18-APR-1997; U06753.
 PR 18-APR-1996; GB-007992.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 PA (SMIK) SMITHKLINE BEECHAM PLC.
 PI Lawlor EJ;
 DR WPI; 97-526211/48.
 DR N-PSDB; T91268.
 PT New isolated nucleic acid encoding glutamyl tRNA synthetase of
 PT Streptococcus pneumoniae - useful for diagnosis, treatment and
 PT prevention of bacterial infections, especially meningitis
 PS Claim 12; Page 35-36; 42pp; English.

CC The present sequence represents glutamyl tRNA synthetase (glus) from
 CC streptococcus pneumoniae 0100993 (NCIMB 40794). The polynucleotide
 CC encoding glus is used to express recombinant glus, i.e. the glus
 CC polypeptide or their fragments, which are used to treat conditions that
 CC require glus activity, also as antisense sequences to control expression
 CC of glus. Glus, or vectors that express it, are used to induce an immune
 CC (antibody and/or T cell) response, specifically for protection against
 CC S. pneumoniae infection or to screen for (ant)agonists of the
 CC polynucleotide/protein activity, particularly antibacterials.
 CC Antagonists, e.g. Ab, are used to treat conditions requiring inhibition
 CC of glus, generally any S. pneumoniae infection but particularly
 CC meningitis. Fragments of the polynucleotide encoding glus are useful as
 CC probes to isolate full-length or related sequences, or for diagnosis,
 CC e.g. by polymerase chain reaction, of the stage and type of an
 CC infection, including detection of mutations and polymorphisms. Diagnosis
 CC may also be done by detecting overexpression of the glus genes, e.g. by
 CC immunoassay. Ab are used to treat infections; to isolate/identify glus-
 CC expressing clones; to purify glus and as immunoassay reagents. More
 CC generally, glus encoding polynucleotide-antagonists can prevent adhesion
 CC of bacteria to wounds, in-dwelling devices; block glus-protein mediated
 CC invasion of mammalian cells and block normal progression of infection.
 CC Sequence 348 AA;
 SQ
 Query Match 5.9%; Score 6; DB 1; Length 348;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 212 DDHIAN 217
 QY 88 DDHIAN 93
 RESULT 73
 ID R98154 standard; Protein; 355 AA.
 AC R98154;
 DT 06-JAN-1997 (first entry)
 DE Blowfly PM48 antigen.
 KW Blowfly strike; cutaneous myiasis; PM48; antigen; vaccine.
 OS Lucilia cuprina.
 FH Key Location/Qualifiers
 FT modified_site 97..99
 FT /label= Glycosylation
 FT /note= "potential N-linked glycosylation site"
 FT modified_site 340..342
 FT /label= Glycosylation
 FT /note= "potential N-linked glycosylation site"
 FT AU9531744-A.
 PN 18-APR-1996.
 PD 20-SEP-1995; 031744.
 PR 29-SEP-1994; AU-008452.
 PA (CSIR) COMMONWEALTH SCI & IND RES ORG.
 PI Eisemann CH, Schorderet SA, Tellam RL;
 DR WPI; 96-222457/23.
 DR N-PSDB; T30074.
 PT PM48 antigen from Lucilia cuprina and related DNA - useful in
 PT vaccines to protect sheep against blowfly strike
 PS Claim 1; Fig 5; 50pp; English.
 CC PM48 antigen (R98154) is a Lucilia cuprina peritrophic membrane
 CC protein. Its amino acid sequence was deduced from a cDNA clone
 CC (T30074) obt'd. from first instar larvae. Large quantities of
 CC recombinant PM48 antigen can be produced in transformed host cells.
 CC Vaccines comprising the PM48 antigen are useful for the prophylaxis
 CC or treatment of blowfly strike in sheep. The vaccine is effective
 CC against blowfly strike due to blowflies from genera including
 CC Lucilia, Calliphora, Chrysomya and Cochliomyia.
 CC Sequence 355 AA;
 SQ
 Query Match 5.9%; Score 6; DB 1; Length 355;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 188 CERTNG 193
 QY 111111

Qy 22 CERTNG 27

RESULT 74
 ID W79743 standard; Protein; 374 AA.
 AC W79743;
 DT 02-FEB-1999 (first entry)
 DE Crepis sp. delta-12-epoxygenase.
 KW Fatty acid epoxygenase; CrepX gene; delta-12-epoxygenase;
 KW mixed function monooxygenase; epoxygenated fatty acid;
 KW transgenic plant; vegetable oil; oilseed.
 OS Crepis sp.

EH Key Location/Qualifiers
 FT Region 99..104
 FT /note= "His-rich region"
 FT Region 135..139
 FT /note= "His-rich region"
 FT Region 309..313
 FT /note= "His-rich region"
 FT Misc_difference 293
 FT /note= "encoded by AGN"
 FT Misc_difference 305
 FT /note= "encoded by GTN"

PN W09846762-A1.
 PD 22-OCT-1998.
 PF 09-APR-1998; AU0246.
 PR 20-JUN-1997; US-050403.
 PR 15-APR-1997; AU-006223.
 PR 15-APR-1997; AU-006226.
 PR 16-APR-1997; US-043706.
 PA (CSIR) COMMONWEALTH SCI & IND RES ORG.
 PI (SYM) STYMNE S.
 PI Green A, Lenman M, Singh S, Stymne S;
 DR WPI: 98-568734/48.
 DR N-PSDB: V63102.

PT New isolated fatty acid epoxygenase gene - used particularly for
 PT transforming plants for producing modified oils for use in, e.g.
 PT coatings, resins, glues, plastics, surfactants or lubricants
 PS Claim 29; Page 84-86; 150pp; English.
 CC This is the amino acid sequence of a novel epoxygenase of a
 CC vernolic acid-containing Crepis sp. (not Crepis palaestina). It
 CC was deduced from isolated cDNA clone CrepX (see V63102). The
 CC deduced sequence contains His-rich motifs (see W79752-54) that are
 CC characteristic of mixed function monooxygenases, and shows a high
 CC degree of homology to a novel delta-12-epoxygenase (see W79742) of
 CC C. palaestina. The invention relates generally to novel genetic
 CC sequences (see V63101-03) encoding fatty acid epoxygenases (see
 CC W79742-44), especially delta-12-epoxygenases or mixed function
 CC monooxygenases. These provide the means by which fatty acid
 CC metabolism can be manipulated in e.g. yeast, mould, bacteria,
 CC insects, birds, mammals and plants (especially oilseed plants such
 CC as flax), in particular to convert unsaturated fatty acids to
 CC epoxygenated fatty acids. The invention includes genetically
 CC modified oil-accumulating organisms and to the oils derived from
 CC them. These oils can be used in production of coatings, resins,
 CC glues, plastics, surfactants or lubricants.
 SQ Sequence 374 AA;

Query Match 5.9%; Score 6; DB 1; Length 374;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 141 NTSSID 146
 |||||
 Qy 30 NTSSID 35

RESULT 75
 ID W79742 standard; Protein; 374 AA.
 AC W79742;
 DT 02-FEB-1999 (first entry)
 DE Crepis palaestina delta-12-epoxygenase.
 KW Fatty acid epoxygenase; Cpal2 gene; mixed function monooxygenase;

KW delta-12-epoxygenase; epoxygenated fatty acid; transgenic plant;
 KW vegetable oil; oilseed.
 OS Crepis palaestina.
 EH Key Location/Qualifiers
 FT Region 99..104
 FT /note= "His-rich region"
 FT Region 135..139
 FT /note= "His-rich region"
 FT Region 309..313
 FT /note= "His-rich region"

PN W09846762-A1.
 PD 22-OCT-1998.
 PF 09-APR-1998; AU0246.
 PR 20-JUN-1997; US-050403.
 PR 15-APR-1997; AU-006223.
 PR 15-APR-1997; AU-006226.
 PR 16-APR-1997; US-043706.
 PA (CSIR) COMMONWEALTH SCI & IND RES ORG.
 PI (SYM) STYMNE S.
 PI Green A, Lenman M, Singh S, Stymne S;
 DR WPI: 98-568734/48.
 DR N-PSDB: V63101.

PT New isolated fatty acid epoxygenase gene - used particularly for
 PT transforming plants for producing modified oils for use in, e.g.
 PT coatings, resins, glues, plastics, surfactants or lubricants
 PS Claim 29; Page 78-81; 150pp; English.
 CC This is the amino acid sequence of a novel mixed function
 CC monooxygenase of Crepis palaestina that is characterised as having
 CC delta-12-epoxygenase activity. It was deduced from isolated
 CC full-length cDNA clone Cpal2 (see V63101). The deduced sequence
 CC contains His-rich motifs (see W79752-54) that are characteristic of
 CC delta-12-desaturase enzymes. The Cpal2 gene was shown to be highly
 CC expressed in developing seeds, with no expression detectable in
 CC leaves. The invention relates generally to novel genetic sequences
 CC (see V63101-03) encoding fatty acid epoxygenases (see W79742-44),
 CC especially delta-12-epoxygenases or mixed function monooxygenases.
 CC These provide the means by which fatty acid metabolism can be
 CC manipulated in e.g. yeast, mould, bacteria, insects, birds, mammals
 CC and plants (especially oilseed plants such as flax), in particular
 CC to convert unsaturated fatty acids to epoxygenated fatty acids.
 CC The invention extends to genetically modified oil-accumulating
 CC organisms and to the oils derived from them. These oils can be
 CC used in production of coatings, resins, glues, plastics,
 CC surfactants or lubricants.
 SQ Sequence 374 AA;

Query Match 5.9%; Score 6; DB 1; Length 374;
 Best Local Similarity 100.0%; Pred. No. 7.69e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 141 NTSSID 146
 |||||
 Qy 30 NTSSID 35

Search completed: Wed Aug 16 09:59:07 2000
 Job time : 43 secs.

